FINAL
ENVIRONMENTAL ASSESSMENT
(WITH FINDING OF NO SIGNIFICANT IMPACT)

FOR

LA 531 OVERPASS OVER I-20
MINDEN, LA
WEBSTER PARISH
STATE PROJECT NO. H.001799
FEDERAL AID PROJECT NO. H001799

MAY 2017

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

AND

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

FEDERAL HIGHWAY ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT

FOR

STATE PROJECT NO H.001799.2

F.A.P. NO H001799

LA 531 OVERPASS OVER I-20

ROUTE: LA 531

WEBSTER PARISH

The FHWA has determined that this project will not have any significant impact on the human environment. This Finding of No Significant Impact (FONSI) is based on the Environmental Assessment (EA) which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the attached EA.

5/22/2017

Date

Joshua Cunningham

Project Delivery Team Leader

Federal Highway Administration

Louisiana Division

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Acronyms

ADT	Average Daily Traffic
APE	Area of Potential Effect
AMSTM	American Society for Testing and Materials
BFE	Base Flood Elevations
CE	Categorical Exclusion
dBA	A-weighted Decibels
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
I-10	Interstate 10
I-12	Interstate 12
LDEQ	Louisiana Department of Environmental Quality
LADOTD	Louisiana Department of Transportation and Development
LDWF	Louisiana Department of Wildlife and Fisheries
LNHP	LDWF Natural Heritage Program
LOS	Level of Service
LWCF	Land and Water Conservation Fund
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
REC	Recognized Environmental Condition
ROW	Right-of-Way
SHPO	State Historic Preservation Officer
STAA	Surface Transportation Authorization Act
TMP	Transportation Management Plan
USACE	U.S. Army Corps of Engineers
USC	United States Code
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
VMT	Vehicle Miles Traveled

ENVIRONMENTAL CHECKLIST

State Project No. H.001799.2
F.A.P. No. H001799
LA 531 Over I-20
Route: LA 531
Webster Parish

1. General Information

☐Conceptual Layout ☒Line and Grade ☐Preliminary Plans
☐Survey ☐Plan-in-Hand ☐Advance Check Prints

2. Class of Action

☐ Environmental Impact Statement (E.I.S.) ☐ State Funded Only (EE/EF/ER)
☒ Environmental Assessment (E.A.)
☐ Categorical Exclusion (C.E.)
☐ Programmatic C.E. (as defined in FHWA letter of agreement dated 03/15/95)

3. Project Description

See project description

4. Public Involvement

☒ Views were solicited on February 9, 2012
☐ Views were not solicited.
☒ Public Involvement events held. (Public Meetings March 17, 2011 and December 6, 2012.)
☒ A public hearing/opportunity for requesting a public hearing required. (October 25, 2016.)
☐ A public hearing/opportunity for requesting a public hearing not required.

5. Real Estate

	NO	YES	N/A
a. Will additional **right-of-way** be required?	☐	☒	☐
Is right of way required from a **burial/cemetery** site?	☒	☐	☐
Is right-of-way required from a Wetland Reserve Program (**WRP**) property?	☒	☐	☐
Is required right-of-way prime **farmland**? (Use form AD 1006, if needed)	☒	☐	☐
b. Will any **relocation** of residences or businesses occur?	☒	☐	☐
c. Are construction or drainage **servitudes** required?	☒	☐	☐

6. Section 4(f) and Section 6(f)

	NO	YES	N/A
a. Will historic sites or publicly owned parks, recreation areas, wildlife or waterfowl refuges (**Section 4f**) be affected?	☒	☐	☐
b. Are properties acquired or improved with **L&WC** funds affected?	☒	☐	☐

7. Cultural Section 106

		NO	YES	N/A
a.	Are any **known historic properties** adjacent or impacted by the project? (If so, list below)	☒	☐	☐
b.	Are any k**nown archaeological sites** adjacent or impacted by the project? (If so, list site # below)	☒	☐	☐
c.	Would the project affect property owned by or held in trust for a federally recognized **tribal government**?	☒	☐	☐

8. Natural & Physical Environment

		NO	YES	N/A
a.	Are **wetlands** affected?	☐	☒	☐
b.	Are **other waters** of the U.S. affected?	☐	☒	☐
c.	Are **Endangered/Threatened Species**/Habitat affected?	☒	☐	☐
d.	Is project within 100 Year **Floodplain**?	☒	☐	☐
e.	Is project in **Coastal Zone** Management Area?	☒	☐	☐
f.	Is project in a **Coastal Barrier Resources** area?	☒	☐	☐
g.	Is project on a **Sole Source Aquifer**?	☒	☐	☐
h.	Is project impacting a **navigable waterway**?	☒	☐	☐
i.	Are any State or Federal **Scenic Rivers/Streams** impacted?	☐	☒	☐
j.	Is a **noise** analysis warranted (Type I project)	☐	☒	☐
k.	Is an **air** quality study warranted?	☒	☐	☐
l.	Is project in a **non-attainment** area?	☒	☐	☐
m.	Is project in an approved Transportation Plan, Transportation Improvement Program (TIP) and State Transportation Improvement Program (**STIP**)?	☐	☒	☐
n.	Are **construction** air, noise, & water impacts major?	☒	☐	☐
o.	Will the project affect or be affected by a **hazardous waste site**, leaking underground storage tank, oil/gas well or other potentially contaminated site?	☒	☐	☐

9. Social Impacts

		NO	YES	N/A
a.	Will project change **land use** in the area?	☒	☐	☐
b.	Are any c**hurches and schools** impacted by or adjacent to the project? (If so, list below)	☐	☒*	☐
c.	Has **Title VI** been considered?	☐	☒	☐
d.	Will any **specific groups** be adversely affected? (i.e., *minorities, low-income, elderly, disabled,* etc.)	☒	☐	☐
e.	Are any h**ospitals, medical facilities, fire police** facilities impacted by or adjacent to the project? (If so, list below)	☒	☐	☐
f.	Will **Transportation patterns** change?	☒	☐	☐
g.	Is **Community cohesion** affected by the project?	☒	☐	☐
h.	Are **short-term social/economic** impacts due to construction considered major?	☒	☐	☐
i.	Do conditions warrant **special construction times?** (i.e., *school in session, congestion, tourist season, harvest*)	☒	☐	☐
j.	Were **Context Sensitive Solutions** considered? (If so explain below)	☒	☐	☐
k.	Were **bike and pedestrian** accommodations considered? (explain below)	☒	☐	☐
		NO	YES	N/A
l.	Will the **roadway/bridge be closed?** (If yes, answer questions below)	☒	☐	☐
	Will a **detour bridge** be provided?	☐	☐	☐
	Will a **detour road** be provided?	☐	☐	☐

Will a **detour route** be signed? ..... ☐ ☐ ☐

10. Permits (Check all permits that may be required)

☒Corps Nationwide	☐CUP/Consistency Determination	☐LA Scenic Stream
☐Corps Section 404/10	☐USCG Bridge	☐DEQ WQC
☐Levee	☐USCG Navigational Lights	☐LPDES Stormwater
☐Other (explain below)		

11. Other (Use this space to explain or expand answers to questions above.)

*Pleasant Grove church is located adjacent to LA 531 about half a mile from its intersection with I-20. It will not be affected by the project as the construction work for project does not extend to that location.

Public meetings were held on March 17, 2011, and December 6, 2012. Public Hearing was held on October 25, 2016 and no adverse comments were received. The project is not located in a historic District or adjacent to a structure listed on the National Register of Historic Places (HRHP). A cultural resources survey was conducted by LADOTD environmental Section and determined that no Historic Properties will be affected. SHPO concurrence letter dated April 3, 2013 is included in Appendix A.

Preparer: Ezekiel Onyegbunam
Title: E.I. 2
Date: April 18, 2017

Attachments

☒ S.O.V. and Responses
☒ Wetlands Finding
☒ Project Description Sheet
☐ Conceptual Stage Relocation Plan
☒ Noise Analysis
☒ Air Analysis
☒ Exhibits and/or Maps
☐ 4(f) Evaluation
☐ Form AD 1006 (Farmlands)
☒ 106 Documentation
☐ Other_____

SUMMERY OF PERMITS, MITIGATION, AND COMMITMENTS

Permits

A permit will required from the U.S. Army Corps of Engineers (USACE) , Vicksburg District. Approximately 1.98 acres of jurisdictional wetlands and 0.23 acres of Other Waters of the US will be potentially impacted (see Appendix C) within the proposed project limits. This recommendation will be provided to the US Army Corps of Engineers, which has ultimate responsibility as to whether or not it is jurisdictional. Through the issuance of a permit, the proposed project may be subject to additional measures by the USACE.

Mitigation

To mitigate potential impacts and water quality impacts to surface waters, the proposed project will adhere to standard LADOTD best management practices (BMPs) and applicable LADEQ permit provisions to prevent erosion and nonpoint source pollution that may result from construction-related activities.

Required drainage structures shall be designed, installed, and maintained to ensure an appropriate flow of water through the project area and to ensure no adverse impact to the function of local floodplains.

Commitments

The new-proposed LA 531 Overpass is expected to be built off of the existing alignment next to the existing bridge. Lane closures on I-20 will be required for LA 531 bridge work taking place over I-20. Requirements within EDSM VI.1.1.4 and VI.1.1.8, Queue Analysis for Interstate Lane Closures and Revised Status 48:279, Night Time work on construction and maintenance projects will be adhered to. Queue Analysis data and historical data will be used to justify lane closure times in conjunction with the aforementioned EDSM's and Revised Statute.

1.0 `Introduction

The Louisiana Department of Transportation and Development (LADOTD) and the Federal Highway Administration (FHWA) are proposing to replace the existing two lane LA 531 overpass structure over I-20 in Webster Parish, Louisiana. The project limits are from I-20 service road to circle lane (just north of Petrochem Drive) to I-20 service lane (just south of Jimmy Batton/Taylor Road). Three build alternatives are being considered in addition to the no-build alternative. Two build alternatives would widen the existing overpass to allow for additional left turns onto I-20, while the third build alternative would incorporate roundabouts at the end of a new structure to allow for the left turn movements. The location and limits of the proposed project are identified in Figure 1.

This document is an Environmental Assessment (EA) prepared to evaluate the effects the proposed project would have on the natural and human environment.

1.1 What is an Environmental Assessment?

The National Environmental Policy Act (NEPA) directs federal agencies to conduct environmental reviews to consider the impacts that may result from proposed federal undertakings. The NEPA process requires coordination with local, state, and federal agencies throughout planning and project development decision-making.

When considering approval of proposed transportation projects, FHWA and LADOTD are committed to the examination and minimization of potential impacts to the human and natural environment. NEPA requires the consideration of project alternatives that would satisfy the project's stated purpose while balancing the potential effects the project may have on the human and natural environment.

To ensure transparency, the NEPA process must be clearly documented. Potentially affected communities, effected parties, and other stakeholders are provided the opportunity to ask questions and provide comments about proposals, alternatives, and potentially environmental effects. Public input, responses to public concerns, and choices made about the project are fully documented in the EA.

When the significance of impacts from a proposed transportation project is uncertain, an EA is prepared. Unlike an Environmental Impact Statement (EIS) that is prepared when significant impacts are known, an EA is a concise public document that presents sufficient evidence and analysis for determining whether the impacts from the proposed action warrant further analysis in an EIS, or whether a Finding Of No Significant Impact (FONSI) is appropriate.

1.2 Project Description

The proposed project consists of replacing the existing two lane LA 531 overpass over I-20 in Webster Parish, Louisiana. The project limits are from just north of Petrochem Drive to just south of Jimmy Batton/Taylor Road. Three build alternatives are being considered in addition to the no-build alternative. Two build alternatives would widen the existing overpass to allow for additional left turns onto I-20, while the third build alternative would build a new bridge with roundabouts at each end to facilitate the additional left turns.

1.3 Where is the Proposed Project in the Development Process?

FHWA approved the logical termini (the end points of the project study area) as US 80 to the north and the intersection of LA 532 to the south. The limits of construction, i.e., the segment of roadway where bridge replacement project is proposed, extend from I-20 service lane (just north of Petrochemical Drive) to circle lane (just south of Jimmy Batton/Taylor Road.

Prior to commencement of the EA, LADOTD provided preliminary project information to federal, State, and local agencies; elected officials, local stakeholders, and other interested parties, requesting their views regarding the project. Open House Public Meetings were held on March 17, 2011, and December 6, 2012, to inform interested parties on the relevant project components, the proposed alternatives, and the environmental clearance process. Transcripts of the Open House Public Meeting were distributed to State and local officials, and public State and local libraries.

Upon approval by FHWA, and to solicit public comment on the project, the EA will be distributed to State and federal regulatory agencies, affected communities, libraries in the project area, and other interested parties. As required, a Public Hearing will be scheduled once this EA is approved by FHWA for public distribution.

2.0 Project Purpose and Need

The existing LA 531 Overpass was built in 1960 and has now been classified as structurally deficient, which makes it eligible for federal bridge replacement funds and it has been recommended for replacement.

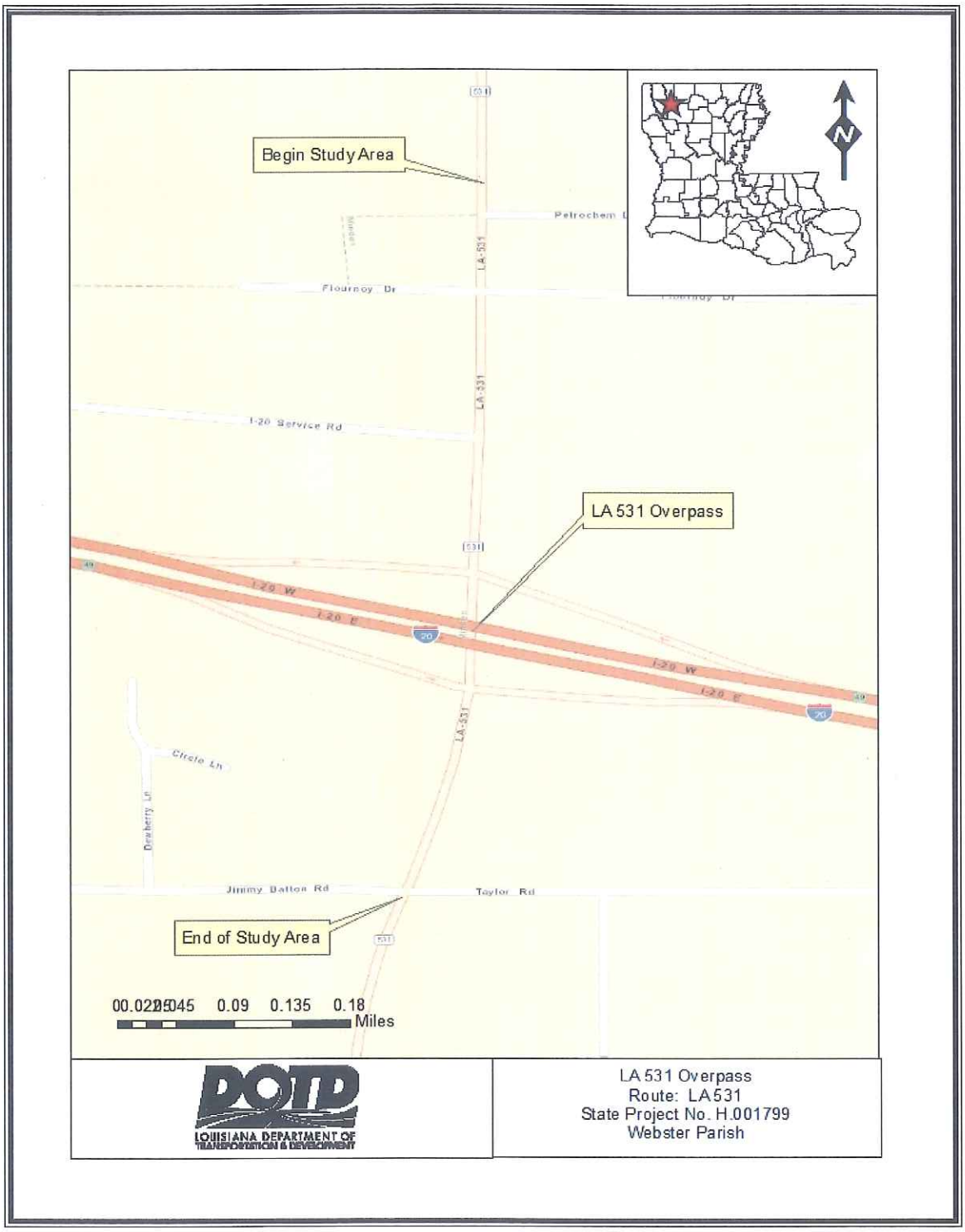
2.1 What is the Purpose of the Project?

The primary purpose of the proposed project is to replace a structurally deficient and functionally obsolete overpass on LA 531 over I-20.

2.2 Why is the Project Needed?

The overpass has been classified as structurally deficient and major rehabilitation will not be able to address the deficiencies. Also, the traffic volumes have increased since the overpass was constructed in 1960, and additional turning movements are necessary to accommodate traffic and to meet current design standards. The replacement of the overpass along with additional improvements at the intersections and interstate ramps will improve traffic flow along LA 531.

Figure 1: Project Location



Capacity

Traffic volume data was estimated by LADOTD Traffic Engineering Management. Traffic counts measured existing average daily traffic (ADT), and utilized an annual growth rate of 2.0 percent to forecast future ADT. Year 2015 and 2035 ADT were estimated at 16,723 and 24,849 vehicles per day, respectively.

Congestion

The traffic model output shows the eastbound off-ramp and westbound off ramp are both expected to reach unacceptable Levels of Service (LOS) before the life of the bridge ends.

Level of Service is a qualitative measure describing operational conditions within a traffic stream. This measure is based on factors such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Depending on these operational conditions, the roadway is assigned a grade of A through F. An "A" represents free flow traffic and an "F" represents operational failure, with ease of traffic movement becoming increasingly difficult as the volume of traffic increases. LOS D describes decreasing free-flow levels, with reduced speeds and more limited maneuverability within the traffic stream.

3.0 Alternatives Considered

NEPA requires that reasonable alternatives that could address the identified purpose and need of the project be considered, including a No Build Alternative.

3.1 Build Alternatives

Alternative 1: LA 531 Interchange Improvements

Alternate 1 proposes replacing the existing two lane overpass with a widened overpass structure. The widened overpass structure will be striped to accommodate one northbound lane, one southbound lane, and a left turn lane, but will be constructed wide enough to accommodate two northbound lanes, two southbound lanes, and a center left turn lane in the future. LA 531, south of the I-20 eastbound ramp, will be widened to three lanes, adding a right turn lane onto the eastbound I-20 ramp. Two frontage roads will also be installed south of the I-20 and LA 531 interchange to allow safe access to the businesses near the interchange. North of the overpass, LA 531 will be widened to four lanes, and after Industrial Drive, LA 531 will be widened to three lanes, two through lanes and a center two-way left turn lane. The I-20 and LA 531 interchanges would remain as stopped controlled and the LA 531 and Industrial Drive intersection would remain as signal controlled. This Alternative is shown in Figure 2.

Alternative 1-A: LA 531 and Industrial Drive Roundabout

Alternate 1A proposes the same improvements as Alternate 1 with the exception of installing a roundabout at the intersection of LA 531 and Industrial Drive instead of having a signal controlled intersection. This Alternative is shown in Figure 3.

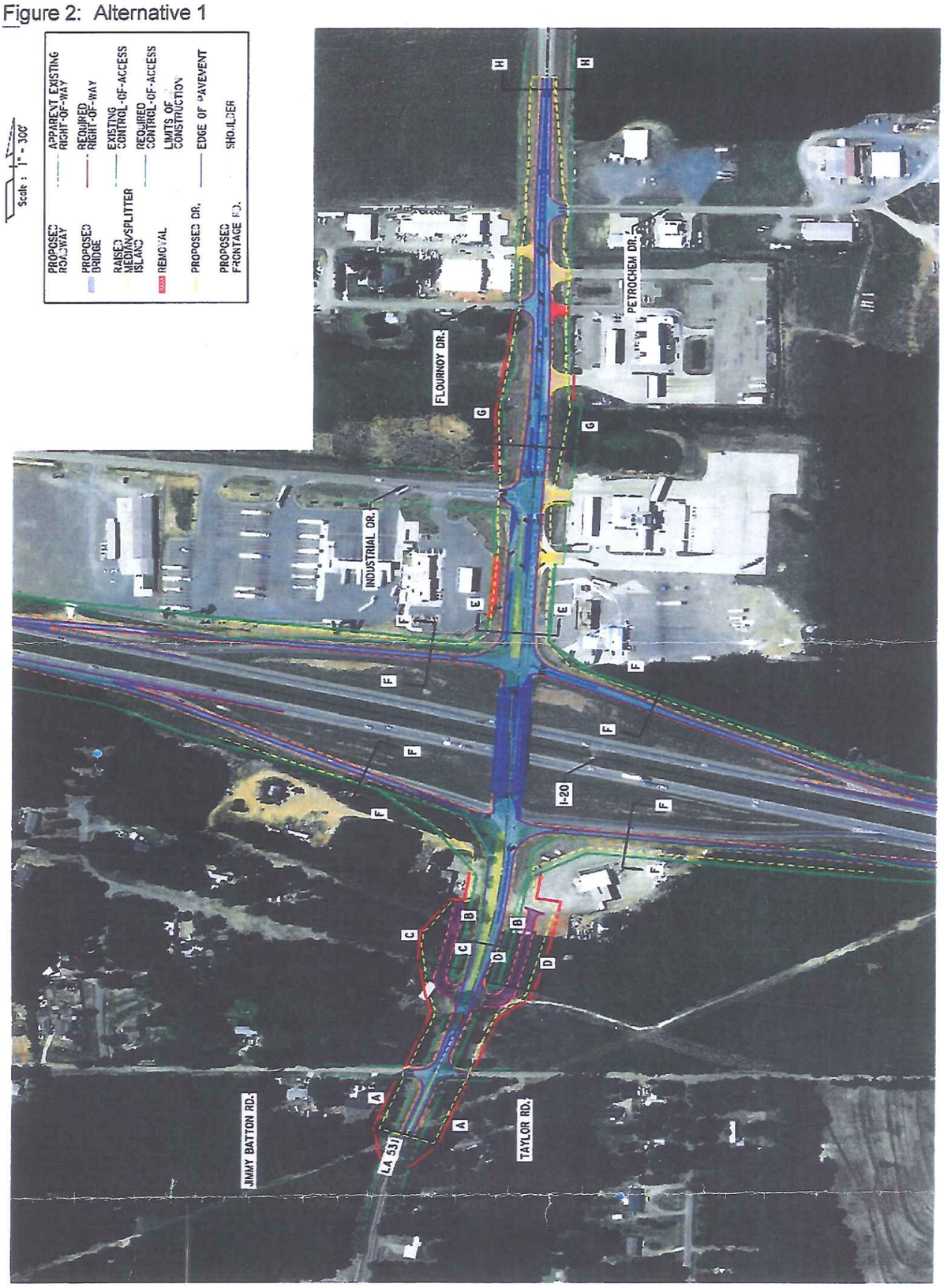
Alternative 2: LA 531 Roundabouts

Alternate 2 proposes replacing the existing two lane overpass with a new overpass and installing single-lane roundabouts at the following intersections: LA 531 and the I-20 eastbound ramp, LA 531 and the I-20 westbound ramp. This Alternative is shown in Figure 4.

3.2 No Build Alternative

In addition to the Build Alternative, the alternative of taking no action is also evaluated. A No Build Alternative is studied for purposes of comparison and for consideration in cases where adverse impacts to the environment might outweigh the benefits derived from proposed project. The environmental effects associated with the "no action" alternative will be compared with the effects resulting from the proposed action. Where a choice of "no action" by the agency would result in predictable actions by others, these actions are considered to be consequences of the No Build Alternative and are included in the analysis. Other planned and programmed activities, such as other maintenance and regional improvements would be performed as scheduled under the No Build Alternative. Under the No Build Alternative, the proposed replacement of the LA 531 overpass would not occur. The overpass would remain structurally deficient and the future improvements for traffic within the project area would not be realized.

Figure 2: Alternative 1



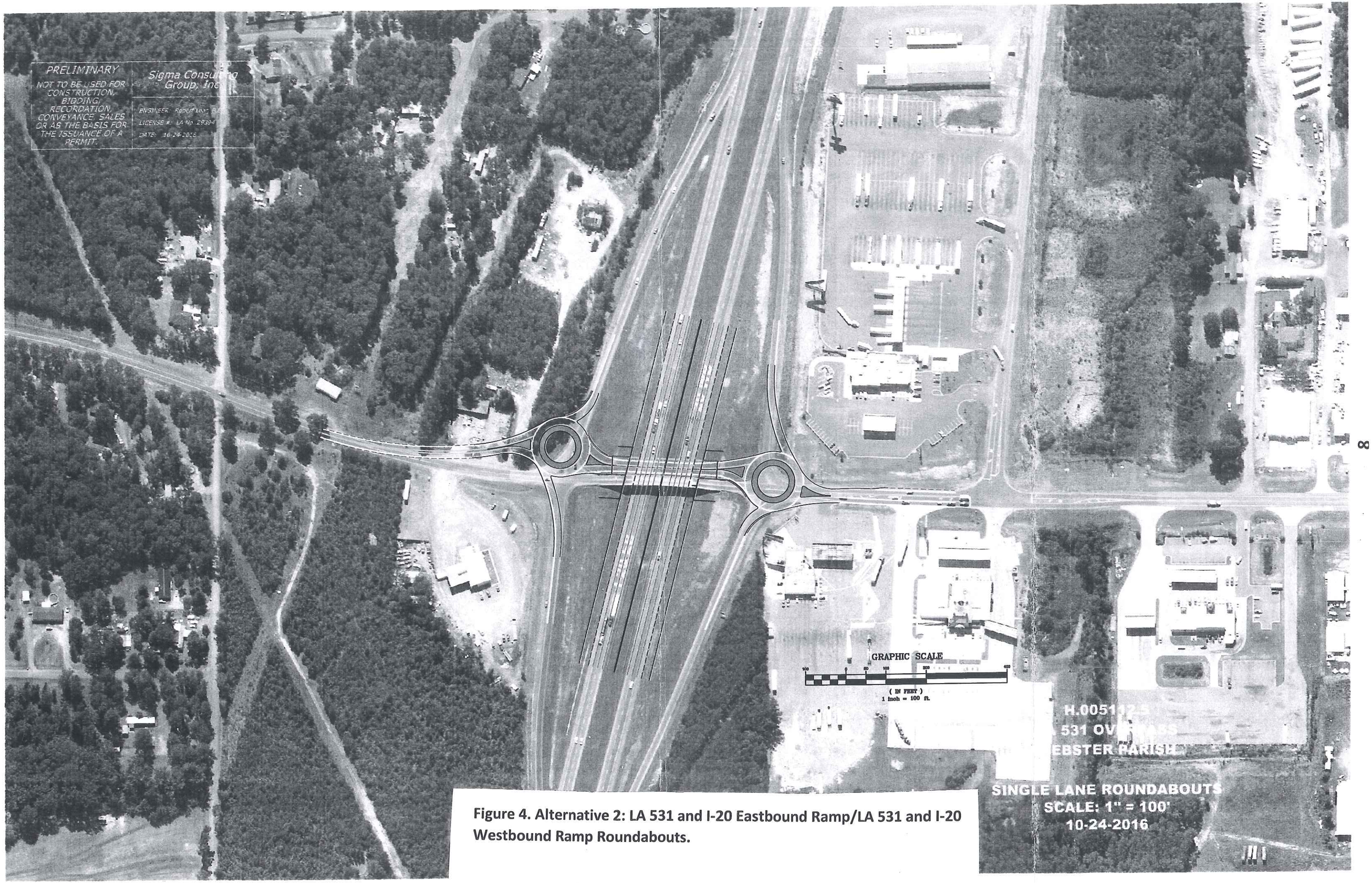
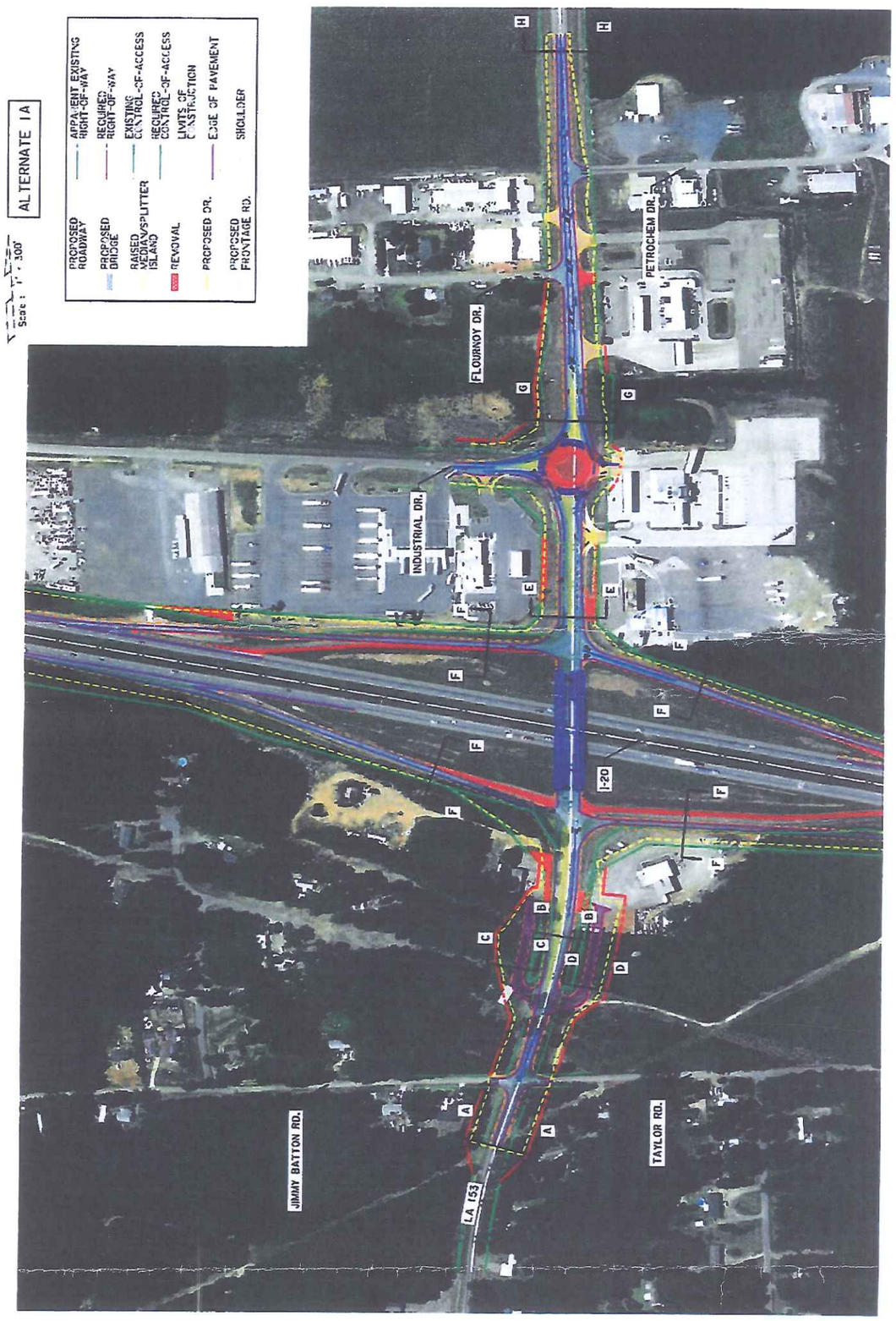


Figure 4. Alternative 2: LA 531 and I-20 Eastbound Ramp/LA 531 and I-20 Westbound Ramp Roundabouts.

Figure 3: Alternate 1A



3.3 Preferred Alternative

The final stage of the alternatives development process is the selection of a preferred alternative by FHWA and LADOTD. The selection of a preferred alternative takes into consideration the environmental effects of each alternative, cost, public opinion, and other factors. As a result of public input and comments received during the Public Meetings, and in consideration of the environmental impacts, access, and cost factors, Alternative 2 is recommended as the preferred alternative. As detailed in Section 4.0 and as summarized in Table 6.1, Alternative 2 would have impacts similar to those predicted under Alternatives 1 and 1A, but it would function better with regards to traffic considerations.

4.0 Environmental Resources, Impacts, and Mitigation

This section presents a discussion of environmental resources that have the potential to be affected by the activities related to the Build Alternative. How these resources could be affected by the proposed action is the foundation of the NEPA decision-making process. In cases where adverse effects cannot be avoided, consideration must be given to minimizing and mitigating them.

4.1 Environmental Conditions and Potential Effects

4.1.1 Land Use and Community Character

The project area extends approximately 0.7 miles through a commercialized corridor along LA 531 as it passes over I-20. The land directly adjacent to LA 531, from which right-of-way may be acquired, consists of commercial and grassy property frontages frequently interrupted by concrete drives. As a result of this project, portions of those grassy frontages and drives would be permanently incorporated into the right-of-way to accommodate a widened LA 531. Currently, no sidewalks exist on this corridor and the proposed project would not add sidewalks or bike lanes.

4.1.2 Economic Activities

The proposed replacement of the LA 531 overpass will require minimal amounts of right-of-way from either side of the roadway. As such, relocation of some utilities will be required. However, due to the nature of the takings, no businesses would be relocated. The required right-of-way would take landscaping and some parking spaces, but not to a point where businesses would have insufficient parking.

There are several gas stations within the study area that provide fuel and other services for the vehicles travelling along I-20. There is a driveway in the northeast quadrant of the interchange that will need to be closed, but access will still be maintained by providing a driveway further from the interchange ramp. There will be frontage roads constructed south of the interchange to provide access to the existing property. Because the number and location of driveway access is unchanged, access is sufficiently maintained. No significant impact to existing business in the project area would occur.

As with many transportation projects that have occurred or are ongoing within the project area, persons who travel along LA 531 may be temporarily inconvenienced during the construction phase of the project. The

overpass will remain open as much as possible during construction, and due to the temporary nature of construction activities, no project-related adverse effects are anticipated.

4.1.3 Relocations of Homes and Businesses

Due to the proximity of businesses and residences to LA 531, minimal amounts of right-of-way will be purchased from both sides of the roadway in each build alternative to limit encroachment on the adjacent businesses and residences. The proposed project will not require the relocation of any business or residential properties.

4.1.4 Demographics and Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, educational level, or income with respect to the development, implementation, and enforcement of environmental laws. Environmental justice seeks to ensure that minority and low-income communities have access to public information relating to human health and environmental planning, regulations, and enforcement. Environmental justice ensures that no population, especially the elderly and children, are forced to shoulder a disproportionate burden of the negative human health and environmental impacts of pollution or other environmental hazard.

Title VI of the Civil Rights Act (42 United States Code [USC] 2000) and Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994), require an environmental justice review, which entails a thorough evaluation of project effects to persons belonging to the low-income populations and the following minority groups at a minimum:

- Black;
- Asian;
- American Indian and Alaskan Native;
- Native Hawaiian or Other Pacific Islander; and
- Hispanic (of any race.)

A review of the race and ethnicity data for the census blocks within the 2,000 ft. buffer of the project limits was conducted to determine if any minority group(s) would be disproportionately affected by impacts associated with the proposed project.

The proposed project is located in the City of Minden in Louisiana. Database search of Minden (City) QuickFacts, from the US Census Bureau showed that the population of Louisiana (April 2010 estimate) was 4,533,372. In the same year, the population of Minden was 13,082. The Louisiana population was composed of 62.6% White, 32.0% Black, 0.7% American Indian and Alaska Native persons, 1.5% Asian persons. For the City of Minden, it is 46.2% White, 51.7% Black, 0.2% American Indian and Alaska Native persons, and 0.3% Asian persons. The per capital income for Louisiana in the past 12 months (2011 dollars), 2007-2011 was $23,853 and $18,239 for the City of Minden. Persons below poverty level for the same period, was 18.4% for Louisiana and 26.1% for Minden. Complete State and City QuickFacts record is included in Appendix A.

This project implementation should not cause any long term negative social impacts upon the area. Businesses within the project corridor will sustain minor short term inconveniences. It is anticipated that there

will be more developments in the area whether the project is constructed or not. The short term impacts from the proposed project are considered to be minor. There are no expected impacts on community cohesion. As set forth in the U.S Department of Transportation regulations related to Title VI of the Civil Rights of 1964, no person's civil rights will be violated as a result of the proposed project. As set forth by Executive Order 12898, the proposed project will not have a disproportionately high and adverse human health or environmental impact on minority or low income populations. There will be awareness and compliance with all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable) as mentioned in the March 21, 2012 letter from Department of Health and Hospitals, Office of Public Health.

The project would not affect any known unique social groups. There is no information to suggest that any person's civil rights will be violated, as set forth in the U.S. Department of Transportation (DOT) regulations relating to Title V of the Civil Rights Act of 1964. There are no known disproportionately high or adverse effects borne by minority and/or low-income populations.

4.1.5 Cultural Resources

The National Historic Preservation Act (NHPA) establishes policies for protecting historic properties. Under Section 106 of NHPA, federal agencies are required to evaluate the effect federal actions (including funding of actions) have on historic properties. The NHPA established the National Register of Historic Places (NRHP) and state historic preservation programs administered by a State Historic Preservation Officer (SHPO). Historic properties and archaeological sites are physical resources that also represent cultural values and human history. Special consideration must be given to the effects of the proposed project upon any district, site, building, structure, or object that is included or eligible for inclusion in the National Register of Historic Places (NRHP) as required by Section 106 of Public Law 89-665; 80 Stat. 915; 16 USC 470 as amended, also known as the National Historic Preservation Act. These properties are also afforded protection under Section 4(f) of the United States Department of Transportation Act of 1966 (see Section 4.1.6.)

Staff from the LADOTD Environmental Section searched the Louisiana Divisions of Historic Preservation and Archaeology GIS databases to identify existing archaeological sites, standing structures and districts listed or deemed eligible for inclusion on the National Register of Historic Places (NRHP) within or adjacent to the project area. No archaeological sites or districts were identified adjacent to the project area and there are no historic districts in the project area. SHPO concurred with the findings that no historic structures or properties would be effected and their concurrence letter dated May 1, 2013 is included in Appendix A.

The Jena Band of Choctaw Indians responded to the SOVs that they are not aware of any sacred and/or ceremonial sites located within the immediate area of the project. However, they asked that if at any time during the scope of the project, there are any inadvertent discoveries of human remains, pottery, or other cultural significant artifacts found, to notify their office immediately. Also, the Choctaw Nation of Oklahoma requested a letter from the Louisiana SHPO indicating that there are no known archaeological sites located within the project area and that the project has low archaeological potential. This letter was sent to them on April 17, 2012.

4.1.6 Section 4(f) Resources

Section 4(f) of the USDOT Act requires that the FHWA and other DOT agencies consider the publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historic sites affected by their respective undertakings. Under the provisions of the Act, a federally assisted highway project cannot adversely take a designated 4(f) property unless it can be shown that there is no prudent and feasible alternative to doing so. Section 4(f), as specifically related to cultural resources, applies when there is an actual taking of land from, or constructive use of, a historic property. Section 4(f) evaluation requires documentation of completion of the Section 106 process.

As stated in Section 4.1.5 (Cultural Resources) there are no historic properties or features located within or adjacent to the project limits.

4.1.7 Section 6(f) Resources

State and local governments often obtain grants through the Land and Water Conservation Fund (LWCF) Act to acquire or make improvements to parks and recreational areas. Section 6(f) of the Act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of Department of Interior's (DOI) National Park Service (NPS.) Section 6(f) directs DOI to assure that replacement lands of equal value, location and usefulness are provided as conditions to such conversions. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, replacements will be necessary.

The project site is located within a highly commercialized corridor. The LDWF has identified no State or federal park, wildlife refuge, scenic stream, or wildlife management area within the project limits[1]; nor is any local or community park located within or adjacent to the project limits. The proposed project would not result in the conversion of a designated 6(f) resource.

4.1.8 Community Facilities, Services, and Social Resources

The LA 531 corridor is highly commercial with very few community facilities, services, or resources. The Pleasant Grove church is located adjacent to LA 531 about half a mile from its intersection with I-20, but it will not be affected by the project since the construction will not extend to that location. There are no hospitals, medical facilities, or fire and police facilities adjacent to the project. There are no schools in the project area or community centers. Transportation patterns will not be changed with the implementation of this project. Currently there are no bike paths or sidewalks along LA 531 in the study area.

4.1.9 Wildlife and Protected Species

Section 7 of the Endangered Species Act (ESA) of 1973 requires federal actions (e.g., project approvals, funding, other actions) to be implemented in a manner that protected species or their habitat is not jeopardized. The U.S. Fish and Wildlife Service (USFWS) is charged with implementing the ESA and maintains a list of protected plants and animals and their protection status. The Louisiana Natural Heritage Program (LNHP) maintains sighting records of federally protected species and species of state concern.

1 Louisiana Department of Wildlife and Fisheries, SOV Response, see Appendix A.

According to the Louisiana Department of Wildlife and Fisheries (LDWF)[2], Webster Parish provides habitat for the federally endangered Red-cockaded Woodpecker (*Picoides borealis).* No species in the parish are federally designated as threatened. The USFWS has reviewed the proposed project for potential effects to resources under its jurisdiction and has determined the proposed project would have no effect on those resources[3].

According to the LNHP, "no impacts to rare, threatened, or endangered species or critical habitat are anticipated."[4] No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known" at the specified project site.

4.1.10 Wetland Reserve Program

The project corridor does not contain any known property in the Natural Resources Conservation Service (NRCS) Wetland Reserve Program.

4.1.11 Wetlands and Other Waters

Section 404 of the Clean Water Act requires anyone depositing dredged or fill material into waters of the U.S., including wetlands, to receive authorization for such activities. The United States Army Corps of Engineers (USACE) has been assigned responsibility for administering the Section 404 permitting process and makes the determination of whether or not wetlands fall under their jurisdiction.

Field studies were conducted to determine the presence of wetlands and other waters of the U.S. within the project corridor. All wetlands located in the survey were delineated using the three parameters (dominant vegetation, soil characteristics, and hydrology) and methods described within the *1987 Corps of Engineers' Wetlands Delineation Manual* and *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, Version 2.0.*

The project limits were evaluated to determine the presence of "jurisdictional wetlands" defined under Section 404 of the Clean Water Act. A field investigation was conducted to determine the amount of jurisdictional wetlands and other waters of the U.S. within the project limits.

The project would impact approximately 1.98 acres of potentially jurisdictional wetlands and 0.23 acres of potentially jurisdictional other waters of the U.S..[5]

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[2] http://www.wlf.louisiana.gov/wildlife/species-parish-list?tid=271&type_1=All, site accessed December 15, 2014.

[3] United States Fish and Wildlife Service, SOV Response, see Appendix A.

[4] Louisiana Department of Wildlife and Fisheries, SOV Response, see Appendix A.

[5] *Wetland Finding, State Project No. H.001799, LA 531 Overpass*, LADOTD, May 22, 2013.

The USACE will make the final determination as to whether these areas are to be considered jurisdictional wetlands. Mitigation requirements for wetland loss may require creation of acreage off-site in an approved wetland mitigation area. The final mitigation requirements will be determined based upon the functions and values of the impacted wetlands. The Wetland Finding is provided as Appendix B to this Environmental Assessment.

4.1.12 Floodplains

Floodplains are areas flooded during storm events. The 100-year floodplain is defined as the area that would be inundated by a precipitation event that has a 1-in-100 chance of occurring every year. Floodplains are protected by Executive Order 11988, Floodplain Management; 23 Code of Federal Regulations Part 650, *Location and Hydraulic Design of Encroachments on Floodplains*; and DOT 5650.2, *Floodplain Management and Protection*. These regulations require that encroachments within the 100-year floodplain are minimized and that land development inconsistent with floodplain values is avoided.

The proposed overpass replacement and widening would not interrupt or terminate an emergency access or evacuation route. Because the project will be constructed with minimal required right-of-way within a developed commercial area, it would not impact natural or beneficial floodplain values. No significant encroachment of the floodplain would result from the construction of the proposed project. No flood hazard would result from development of the proposed project.

4.1.13 Coastal Resources and Essential Fish Habitat

The proposed project limits is located outside the Louisiana coastal zone and does not encompass any marine or estuarine habitats. No Coastal Use Permit is required.

4.1.14 Subsurface Water

The EPA defines a sole source aquifer as an underground water source that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas have no alternative drinking water source(s) that could physically, legally, and economically supply all those who depend upon the aquifer for drinking water

The proposed project limits are not located above an aquifer system which has been designated a sole source aquifer by the EPA. The EPA has determined that the project, as proposed, is not eligible for review under the Sole Source Aquifer Program[6].

4.1.15 Wild, Scenic, and Natural Rivers

The National Wild and Scenic Rivers System was created by Congress in 1968 to preserve rivers possessing outstanding natural, cultural, and recreational values. The system safeguards characteristics while recognizing the potential for their appropriate use and development. In 1970, the Louisiana Legislature created the Louisiana Natural and Scenic Rivers System. The System was developed for the purpose of

[6] United States Environmental Protection Agency, SOV Response, see Appendix A.

preserving, protecting, developing, reclaiming, and enhancing the wilderness qualities, scenic beauties, and ecological regimes of selected free-flowing streams in Louisiana.

There are no streams designated as a scenic river by the National Wild and Scenic Rivers System or the Louisiana Natural and Scenic Rivers System[7].

4.1.16 Navigable Waterways

There are no navigable waterways within the project limits.

4.1.17 Farmland

NEPA and the provisions of the Farmland Protection Policy Act (FPPA) require that before taking or approving any federal action that would result in conversion of farmland, the federal agency must examine the effects of the action using the criteria set forth in the Act. If adverse effects to farmland are identified, the project proponent must consider alternatives to lessen them. Neither NEPA nor FPPA requires a project to be modified solely to avoid or minimize the effects of conversion of farmland to nonagricultural uses.

No agricultural activity takes place within the project limits; therefore, no conversion of farmland to a non-agricultural use would occur.

4.1.18 Noise

The proposed project may use federal funds to add capacity to the roadway and overpass; therefore a noise analysis is required using the LADOTD noise policy. As part of this project to replace the overpass, a noise study was conducted to determine impacts to adjacent property owners. The majority of LA 531 in the study area is commercial development. The detailed results of this study are in a separate technical report; however, a summary has been provided below.

Aerial photos and topographic maps were used to digitize the roadway and receivers in the Traffic Noise Model (TNM) version 2.5. Detailed traffic data from the LADOTD Planning section was also collected and entered into the computer model. A field visit was conducted to collect field measurements to validate the accuracy of the model. The model was validated and then used to predict the noise levels for three scenarios: the current noise levels (2013), the future no build noise levels (2033), and the future build noise levels (2033).

TNM predicts that currently there are no impacted receivers along the project corridor. The future no build noise level simulation predicts future noise levels resulting from the increased traffic volume. TNM predicts that this future no build scenario would also not impact any receivers in the study area. The future build simulation predicts the future noise levels caused from both the increase in traffic volume and the highway improvements. TNM predicts this future build scenario would not impact any receivers. A business is determined impacted if the dBA is 71 or higher, while a residential property is determined impacted if the dBA is 66 or higher. A receiver can also be impacted if the future noise level exceeds the existing noise level by 10 dBA. None of the receivers were impacted based on the 10 dBA criteria.

[7] Louisiana Department of Wildlife and Fisheries, SOV Response, see Appendix A.

Most of the impacted receivers adjacent to LA 531 have driveways that directly tie into the highway. To preserve access to the highway would require that the noise barrier have gaps at each driveway. The gaps would render the barrier ineffective at reducing the sound levels for the receivers. Discontinuous noise barriers generally cannot achieve an eight-decibel insertion loss required by the LADOTD noise policy; therefore, a detailed analysis of a noise barrier was not performed.

4.1.19 Air Quality

The U.S. Environmental Protection Agency (EPA) established criteria for evaluating air quality in accordance with the 1990 Clean Air Act Amendments. The standards set by the EPA are known as the National Ambient Air Quality Standards (NAAQS). The EPA and Louisiana Department of Environmental Quality (LDEQ) regulate air quality in Louisiana. Air sheds that do not meet the NAAQS are known as non-attainment areas, and require special consideration.

Webster Parish is designated as in attainment for 8-hour ozone. Since the parish does not have the non-attainment designation, no further air quality study is required. Air quality impacts due to construction operations for the proposed highway improvement project are expected to be short-term, minor, and localized. These impacts are anticipated to be minimized by following the procedures outlined in the LDEQ Air Quality Regulations governing fugitive emissions of particulate matter during road construction activities (LAC 33:III.1305).

4.1.20 Hazardous Materials

The purpose of a Phase I Environmental Site Assessment is to identify *recognized environmental conditions* in connection with the subject project in accordance with the American Society of Testing and Materials (ASTM) Standard Practice E-1527-05. The term *recognized environmental condition* means the presence or likely presence of any hazardous substances or petroleum products in the project area under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substance or petroleum products into structures on the property or in the soil, groundwater, or surface water of the subject property. A Phase I Environmental Site Assessment is intended to reflect a commercially prudent and reasonable inquiry in order to satisfy one of the requirements to qualify for the *innocent landowner defense* under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

LADOTD staff made a site visit on May 11, 2012, and April 16, 2013, and interviewed various businesses along the corridor. Close examination of the apparent required right of way revealed no signs of leaking transformers. The detailed Environmental Site Assessment can be found in Appendix C.

The Phase I Environmental Site Assessment identified underground storage tanks. There are four service stations in the project area. The Minden Truck Center has records of inspections, semi-annual groundwater monitoring reports, and a Certification of Registration on a search of the LDEQ data base, but this facility was closed at the time. The other three gas stations, Quick Draw, Loves, and Shell, are open for business and there are no known compliance problems for these stations in the LDEQ files. Poor housekeeping (solid waste accumulation, minor staining, etc.) was noted at some businesses in the corridor, but the sites that appeared to be within the required right of way are deemed *de minimis* situations. A phone interview with the LDEQ Underground Storage Tank Division confirmed that no active remediation sites were within the project corridor.

This assessment has revealed no evidence of recognized environmental conditions in connection with the required right-of-way.

4.1.21 Travel Patterns

SIDRA is a software model that it used to predict traffic delays and levels of service. SIDRA output shows the eastbound off-ramp and westbound off ramp are both expected to reach unacceptable Levels of Service (LOS) before the life of the bridge ends if the bridge remains 2 lanes. A detailed traffic study can be found in Appendix D.

Synchro is another software model that can be used to analyze traffic at intersections. The intersection of LA 531 and Industrial Drive was analyzed as a signal in Synchro (Alternative 1) to determine the optimum cycle length for alternative 1 based on existing peak hour traffic volumes for AM and PM. These parameters were entered into SIDRA and processed for output. The intersection of LA 531 and the I-20 eastbound ramp, and the intersection of LA 531 and the I-20 westbound ramp were also analyzed in SIDRA for each alternative.

The Engineering Directives and Standards Manual (EDSM) was developed to provide procedures, standards, and guides relating to the administration of the Highway Program. Signals were not considered at the ramps because the distance between signals would need to be at least 1/2 mile as required by EDSM VI.3.1.6. The distance from the existing signal at Industrial Drive/I-20 Service Road to the I-20 westbound ramp is only 576 feet, and is less than 1000 feet from the I-20 eastbound ramp. Also, the traffic counts reveal low volumes that do not meet the conditions of EDSM VI.3.1.6 for installing new signals. Each alternative was analyzed with a design life of 20 years and a growth rate of 2 percent. Each roundabout was also analyzed with an environmental factor of 1.1.

Based on the Sidra results and anticipated growth along LA 531, Alternative 2 is the preferred option. This option will provide the most efficient roadway and improve the safety of the corridor by reducing conflict points. Of the 3 alternatives that propose widening LA 531, Alternative 2 has the lowest overall volume to capacity (v/c) ratios, queue lengths, and average delay times while maintaining acceptable Levels of Service. The LA 531 intersection with the I-20 EB ramp showed a drastic decrease in queue length and reduced v/c by roughly 50% when comparing the No Build alternative to Alternative 2. Queue length was reduced from 416 feet to 51 feet in the PM peak hour. Delay reduced by as much as 20 seconds in the PM peak hour. Similarly the intersection of LA 531 and I-20 Service Road/Industrial Drive showed a major decrease in queue length and delay. For all three intersections analyzed in Alternative 2, delay was kept under 2 seconds. Installing roundabouts on LA 531 will also reduce the number of conflict points for potential crashes at each intersection from 32 conflict points to 8 conflict points, making roundabouts the safest alternative. The results for all alternatives can be found in the *Summarized Sidra Analysis Results* table below.

Conceptual drawings, Sidra analysis results, Synchro reports, and distances between intersections can be found in the Traffic Study Report in Appendix D.

Table 4.1 Summarized SIDRA Analysis Results

AM Peak - I-20 @ LA 531 WB RAMP					
		Existing Volumes		20 Year Life Analysis	
		No Build (Stop)	Roundabout	No Build (Stop)	Roundabout
Delay (s)	LA 531 NB	0.7	5	0.5	5
	LA 531 SB	2	5	6	7
	I-20 WB off Ramp	3	8	3	14
	Intersection	5	5	6	7
V/C Ratio	LA 531 NB	0.2	0.3	0.4	0.5
	LA 531 SB	0.4	0.4	0.7	0.8
	I-20 WB off Ramp	0.2	0.2	0.5	0.5
	Intersection	0.4	0.4	0.7	0.8
95% Queue (ft)	LA 531 NB	4	0	13	0
	LA 531 SB	56	102	165	331
	I-20 WB off Ramp	21	33	71	95
	Intersection	56	102	165	331

PM Peak - I-20 @ LA 531 WB RAMP					
		Existing Volumes		20 Year Life Analysis	
		No Build (Stop)	Roundabout	No Build (Stop)	Roundabout
Delay (s)	LA 531 NB	0.8	5	2	5
	LA 531 SB	2	4	5	5
	I-20 WB off Ramp	2	7	6	9
	Intersection	5	5	7	6
V/C Ratio	LA 531 NB	0.2	0.3	0.3	0.4
	LA 531 SB	0.4	0.4	0.7	0.8
	I-20 WB off Ramp	0.1	0.2	0.3	0.3
	Intersection	0.4	0.4	0.7	0.8
95% Queue (ft)	LA 531 NB	7	0	22	0
	LA 531 SB	49	102	148	471
	I-20 WB off Ramp	14	22	39	52
	Intersection	49	102	148	471

4.2 Constructability

The new bridge will be built off alignment on the west side of the existing bridge so the existing bridge will remain operational during construction. Lane closures are expected on the interstate for hanging girders. Night time work on construction and maintenance projects will be identified in the Traffic Management Plan (TMP). A Queue Analysis will be performed to identify lane restrictions. A level 2 TMP will be required. However, in the night or weekends, as required for construction, the I-20 may be detoured through south and west one-lane ramps.

Sequence of Construction:

This project consists of replacing the existing Highway 531 overpass at Intersection 20 and reconfiguration of two intersections into roundabouts. At this level of study, the features have not been fully designed and detailed so only a limited, high level sequence of construction can be suggested.

The intent of the overpass design is that the bridge be constructed as a split-phase construction. This will allow traffic to remain on the existing overpass while the first phase of the overpass is being constructed. Upon the completion of the first phase of the overpass and necessary roadway approach work, traffic can then be switched from the existing structure to the new structure. The existing structure can then be removed.

The last phase of the construction should be the I-20 interchange roundabouts and necessary connecting pavement.

Complete Streets Policy

As required by the State Legislature, LADOTD adopted a Complete Streets Policy for the State of Louisiana in July 2010. This policy seeks to create a comprehensive, integrated, connected transportation network that balances access, mobility, health, and safety needs of motorists, transit users, bicyclists, and pedestrians for all ages and abilities, which includes users of wheelchairs and mobility aids. There are currently no sidewalks or bike paths along this portion of LA 531, and none will be added as part of this project. We will comply with the Complete Streets Design Guide issued by LADOTD and signed by the Chief Engineer on 3/6/2017.

4.3 Indirect Effects

The potential for increased urbanization and land use changes as a result of this project is limited due to the current high level of development along the corridor.

4.4 Cumulative Impacts

Cumulative impacts are those resulting from the incremental impacts of the proposed project as well as those of past, present, and foreseeable future actions. There are no cumulative impacts anticipated as part of this project.

4.5 What will be Done to Mitigate Adverse Impacts?

Due to the location of the project, the proposed project would have a relatively limited effect on the environment. For those impacts that cannot be avoided, mitigation measures, as described below, would be implemented.

Wetland and Other Waters

To ensure no net loss of wetlands, the unavoidable wetlands impacts through along the corridor would be compensated according to an approved mitigation plan developed during the permit process.

To mitigate potential impacts water quality impacts to surface waters, the proposed project will adhere to standard LADOTD best management practices (BMPs) and applicable LDEQ permit provisions to prevent erosion and nonpoint source pollution that may result from construction-related activities.

Construction Impacts

Short-term construction impacts (e.g., noise, air quality) will be mitigated through adherence to applicable local, State, and federal regulations, including (but limited to) Section 107.14 (Environmental Protection) of the Louisiana Specifications for Roads and Bridges and appropriate LDEQ Air Quality Regulations governing fugitive emissions of particulate matter during road construction activities (LAC 33:III.1305). Standard specification 107.27 (Archaeological and Historical Findings) dictates procedures necessary in the event archeological or historical material is discovered during the course of construction-related activities.

5.0 Public Comments and Agency Coordination

5.1 How Was the Public Involved in the Environmental Assessment Process?

Information on the proposed project was sent to federal, state, and local agencies and officials on February 9, 2012. The Solicitation of Views information and the associated responses are included in Appendix A of this EA.

5.2 Open House Public Meetings

Open House Public Meetings for the project were held on March 17, 2011, and December 6, 2012, at the Minden City Council Chamber in Minden, Louisiana. The first meeting notice was published in *The Minden Press Herald* and the *Springhill Press and News Journal* on February 24th and March 10, 2011. On February 17, 2011, notices of the Open House Public Meeting were distributed to the parties previously contacted (per the SOV contact list) and local elected and public safety officials. The second public meeting notice was published in *The Minden Press Herald* and the *Springhill Press and News Journal* on November 15th and November 29, 2012. On November 8, 2012, notices of the Open House Public Meeting were distributed to the parties previously contacted (per the SOV contact list) and local elected and public safety officials.

The Open House Public Meeting provided an opportunity to view the proposed project information, ask questions of the project team, and provide written and verbal comments for consideration. This meeting was opened at 6:00 p.m. and lasted until 8:00 p.m. LADOTD staff set up informational stations, a multi-media

PowerPoint presentation, and a comment table to provide project information for the attendees. Signs were posted at the entrance to direct likely attendees to the meeting. A tape recorder was available during the course of the meeting to record any verbal comments. Details from each meeting are provided below.

Public Meeting of March 17, 2011

A Public Meeting was conducted for the project on March 17, 2011. Copies of transcript for this meeting are available upon request from LADOTD. Comments were received in the form of written statements received after the meeting. A summary of the concerns is provided below.

Larry Tims and Paula Tims commented that their business (Fairway Carts) located at 1620 Hwy 531, will lose their sign and customer parking spaces if the current project layout plan is constructed. They were also concerned that the introduction of the proposed island in the median would eliminate access to their driveway from northbound lane of Hwy 531. They sounded positive note however, that they would appreciate being informed of the project progress, and would welcome future communication and input. They said that they look forward to the progress that this proposal represents and know that a reasonable solution can be achieved.

Bruce Hock commented that they are extremely concerned about placing of a raised curb in the center of LA 531. They specifically listed many reasons why they oppose the proposed project layout. One of their concerns is that the current layout if constructed will make it impossible for 18-wheel trucks to turn west (left) when coming from I-20. Also, that it will be very hard for northbound vehicles making deliveries or other customers to access their business. He stressed that Hock family is unequivocally opposed to the proposed widening of the right-of-way.

Minden Truck Center, L.L.C., commented through a letter delivered by a Law Firm (GORDON ARATA, Mccollam Duplantis & Fagan LLP) that it intends to take any and all possible legal measures at its disposal to prevent the construction of the project as currently planned.

Response: LADOTD responded to all these by going back to revise the project layout to include roundabouts.

Public Meeting Conducted on December 6, 2012.

Another Public Meeting was conducted on December 6, 2012. There were a total of 50 people in attendance for the meeting. A summary of comments received during the meeting is provided below:

Julius Hinze recommended an overpass at Hwy 80 and La 531. He was concerned that reflectors west of Shreveport are bad for tires.

Jerri Depingre commented that his concern is always economic impact for their business on and around LA 531, and that roundabouts look like a long-term solution. He said he would like LADOTD to consider over-night construction whenever possible.

Larry Tims commented with thanks to the new layout design, saying that the new designs are much better to allow access into businesses. However, he has a concern that the turning lane at the north end of the 3 lane stops too soon. Also, he has a concern that during construction, the Industrial Drive traffic will be greatly

increased and that Schools will be open also, making it hard to proceed at the intersection of Industrial Drive/ 371.

Response: LADOTD will avoid lane closures during school's high traffic periods and station flag man to direct traffic to accommodate traffic increase when schools are in session.

Gloria Wilson commented that resident at 337 Jimmy Batton Road is refusing to have power lines moved any closer to her house. She is not pleased with the communication she is receiving about the project. She requested a representative to come and show her why power lines will be moved.

Response: Utility relocations will be handled during construction phase and those affected will be informed and coordinated with. Their questions will be answered during Public Hearing.

Kary Bryce commented that he is in the process of constructing his trucking company which will be accessed off Taylor Road, and that truck turning should be taken into account. He suggested that Taylor Road should be realigned to accommodate larger vehicles turning into the road.

Response: Current project layout that includes roundabouts is designed to accommodate trucks and other larger vehicles turning around.

5.3 Public Hearing

An open house Public Hearing was conducted on October 25, 2016 at Minden City Council Chamber. Two elected Officials and six people from the general public attended the Public Hearing. No comments were received at the Hearing or during the comment period following the Hearing. A revised layout of alternative 2 was presented at the Hearing that included only roundabouts at the interchange ramps. The two outer-most roundabouts had been removed after further study was done prior to the Hearing. The southern-most roundabout at Taylor Road was removed because it was not warranted by future traffic volumes and the northern-most roundabout at Industrial Drive was removed due to steep cross slopes which exceeded the recommended slopes for roundabout design. The attendees at the Hearing were pleased with the final layout as it required less right-of-way and resulted in fewer impacts to the project area.

6.0 Comparison of the Build and No Build Alternative

A comparison of quantifiable project impacts is provided in Table 6.1, offering a basis for discussion of the build alternatives.

Table 6.1 Comparison of Impacts by Alternative

Evaluation Measure	Units	No Build	Alt. 1	Alt. 1A	Alt.2
Relocation Impacts					
Residential Relocations	Each	0	0	0	0
Commercial Relocations	Each	0	0	0	0
Community Relocations	Each	0	0	0	0
Vacant/Unused Structures	Each	0	0	0	0
Other Relocations	Each	0	0	0	0
Natural Environment					
Wetlands	Acres	0	1.98	1.98	1.98
Other Waters of the US	Acres	0	0.23	0.23	0.23
Scenic Streams	Each	0	0	0	0
Stream Crossings	Each	0	0	0	0
Sole Source Aquifer Impacts	Acres	0	0	0	0
Protected Species	Each	0	0	0	0
Prime and Unique Farmland	Acres	0	0	0	0
Coastal Resources and Essential Fish Habitat	Each	N/A	N/A	N/A	N/A
Cultural Resources					
Properties Eligible for or Listed on NRHP	Each	0	0	0	0
Properties Not Eligible for NRHP	Each	0	0	0	0
Section 4(f) and 6(f) Properties	Each	0	0	0	0
Noise					
Impacted receivers	Each	0	0	0	0

At this time, proposed funding for LADOTD's LA 531 Overpass project consists of National Highway Performance Program (NHPP) Funds. The proposed project is currently scheduled to LET for construction in Fiscal Year 2018-2019. Estimated costs were compiled for both Build Alternatives are detailed in Table 6.2. The estimates include construction costs, right-of-way acquisition costs, and utility relocation costs are included in Appendix E as well as detailed figures for each alternative.

Table 6.2 Estimated Costs of the Build Alternatives

Cost	Alternative 1	Alternative 1A	Alternative 2
Roadway Construction	$8,760,549	$8,021,185	$7,954,926
Overpass Construction	$3,300,000	$3,300,000	$1,840,000
Right-of-Way Acquisition	$4,500,000	$4,500,000	$4,500,000
Utility Relocation	$750,000	$750,000	$750,000
Total	**$17,310,549**	**$15,891,185**	**$15,044,926**

APPENDIX A

Solicitation of Views and Responses

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.la.gov
{225-242-4502}

BOBBY JINDAL
GOVERNOR

SHERRI H. LEBAS, P.E.
SECRETARY

February 9, 2012

State Project No. H.001799
F.A.P. No. H.001799
LA 531 Overpass
Route: I-20
Webster Parish

SUBJECT: **Solicitation of Views**

Early in the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist DOTD with the early identification of possible adverse economic, social, or environmental effects or concerns. Your assistance in this regard will be appreciated.

Due to the earliness of this request for your views, very limited data concerning the proposed project exists. We have, however, attached a sketch map showing the general location of the project, along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by **March 19, 2012.** Replies should be addressed to LA DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply. If you have any questions, please call my office at (225) 242-4502.

Sincerely,

Noel Ardoin, P.E.
Environmental Engineer Administrator

Robert Lott

Robert Lott. PE.
Assistant Environmental Engineer

STL

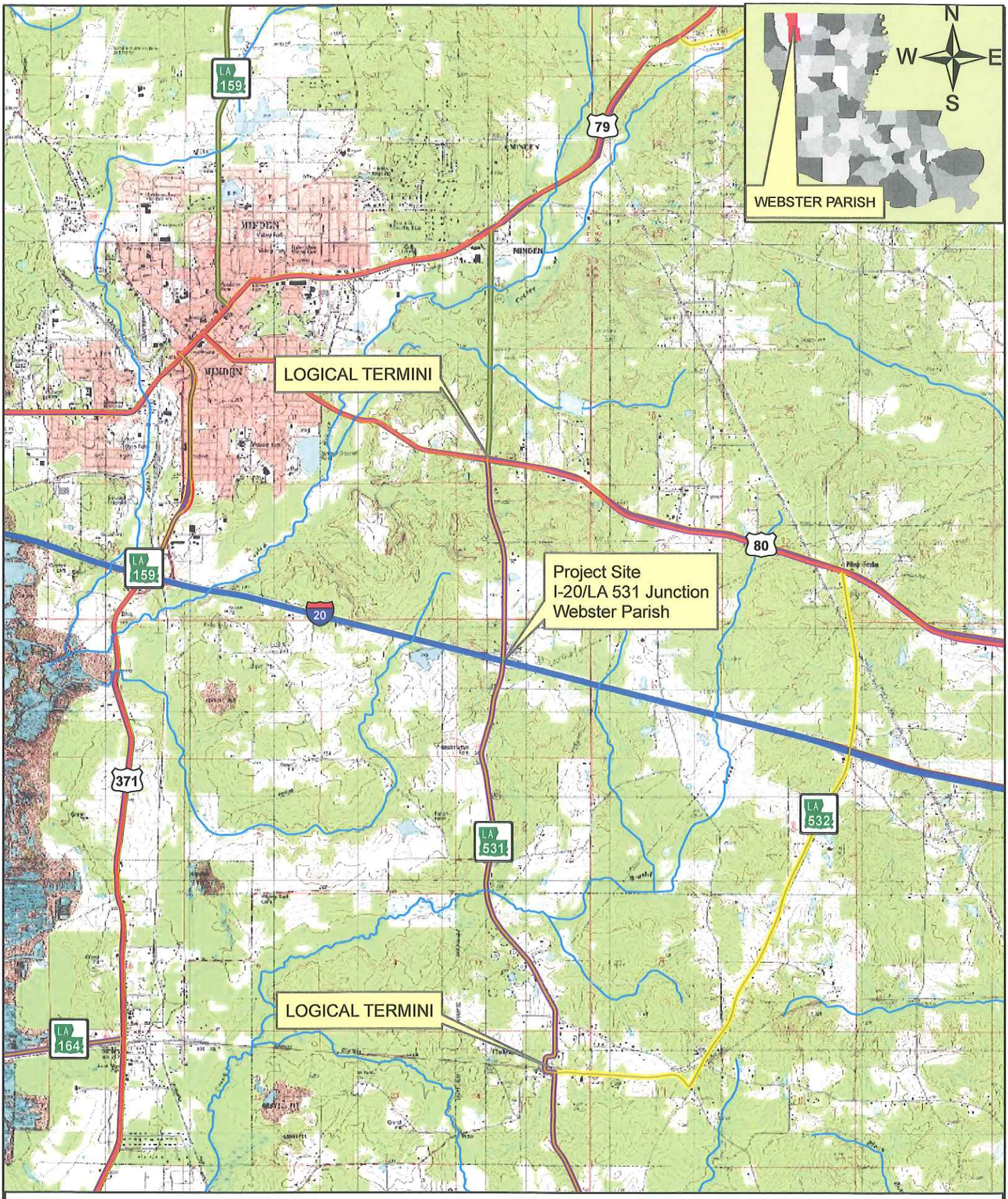
Attachments
NA/RL/EO
Cc: District Administrator

Project Description

The Louisiana Department of Transportation and Development (LADOTD) is proposing to replace the existing two lane LA 531 overpass with a widened structure over I-20 in Webster Parish Louisiana. The actual project limit is from Industrial Drive /I-20 Service Road to Jimmy Baton Road /Taylor Road in Webster Parish. The Bridge between the eastbound and westbound ramps is structurally deficient. This is because the sufficiency rating of the bridge is 32.9 percent, less than 50 percent. A bridge with a sufficiency rating less than 50 percent is recommended for replacement. Steel girder ends are rusted. Girder flanges have severely corroded resulting in section loss. Concrete in pile caps has been spilled with steel reinforcement bars exposed. Bearing pads have deteriorated and need to be replaced.

The proposed roadway will be a four lane section with a raised concrete median/splitter island. The widened overpass structure will accommodate one northbound lane, one southbound lane, and a left turn lane. LA 531, south of the I-20 eastbound ramp will be widened to three lanes, adding a right turn lane onto the eastbound I-20 ramp. Two proposed frontage roads on the south side of I-20 are required to allow access to the adjacent properties located in the SW and SE quadrants of the interchange. Per AASHTO guidance, extending the control-of-access limits from the ramp termini a minimum distance of 300'- 500' down the cross road (LA 531) is necessary to allow for safe and efficient operation of the cross road in the area of the ramps. North of the overpass, LA 531 will be widened to four lanes and after Industrial Drive, LA 531 interchanges would remain as through lanes and a center two-way left turn lane. I-20 and LA 531 interchanges would remain as stopped controlled and the LA 531 and Industrial Drive intersection would remain as signaled. The eastbound off-ramp and the westbound off-ramp are both expected to reach unacceptable Levels of Service (LOS) before the end of the bridge life (about 50 to 70 years) ends, if the bridge is not replaced. LOS represent a qualitative and quantitative evaluation of traffic operation of a roadway and/or intersection using procedures developed by the Transportation Research Board and contained in the Highway Capacity Manual Special Report 209. The Highway Capacity Manual (HCM) procedures have been adapted to computer-based analysis packages. A LOS greater than D is deemed unacceptable. Leaving the ramps as stop controlled will create a LOS of F in the design year for some approaches. The existing bridge is very narrow (24 feet wide) and will be widened to 48 feet to accommodate the growing traffic. The 2-lane bridge is not sufficient to accommodate the average daily traffic (ADT) of 17685 vehicles per day that is crossing the bridge. This includes the truck traffic of 11.9 percent (2010 traffic data). The anticipated ADT for the design year 2030 will be 29550 vehicles per day. This functionally deficient bridge poses safety issues and traffic delays.

Installing roundabouts as proposed will reduce the number of conflict points. Each conflict point represents a potential for crash, so being able to limit the number of conflict points will improve safety. Typical sections and proposed layout of the project can be found in appendix E of this document. A description of the alternatives currently under consideration and the alternatives that were previously discarded is provided in the "Alternatives" section of this document.



Vicinity Map Showing Logical Termini
SP H.001799 (451-03-0047) LA 531 Overpass
Webster Parish

WEBSTER PARISH MAILING LIST
*****UPDATED September 17, 2013*****

The State Senate (District 36)
Senator Robert Adley
611 Jessie Jones Dr
Benton, LA 71006

LA House of Representatives (District 10)
Representative H. Eugene Reynolds
736 Main St
Minden, LA 71055

Webster Parish Police Jury
P O Box 389
Minden La 71055

Louisiana State Police
Troop G
5300 Industrial Drive Extension
Bossier City La 71112

US Dept Of Agriculture
Kisatchie National Forest
2500 Shreveport Highway
Pineville La 71360

Webster Parish School Board
P O Box 520
Minden La 71055

Federal Prog Rev Coord
NW Regional Clearinghouse
P O Box 37005
Shreveport La 71133-7005

Webster Parish Office Of
Emergency Preparedness
P O Box 876
Minden La 71058-0876

Webster Parish Sheriff
410 Main Street
Minden La 71058

Webster Parish Police Jury
Office Of Community Services
P O Box 876
Minden La 71058-0876

Floodplain Administrator
Webster Parish Police Jury
P O Box 389
Minden La 71055

Douglas J Kamien Pe
Deputy For Programs & Project Management
Vicksburg Dist Corps Of Engineers
4155 Clay Street
Vicksburg Ms 39183-3435

Caddo Nation Of Oklahoma
P O Box 487
Binger Ok 73009

Choctaw Nation Of Oklahoma
Ian Thompson Phd, Rpa
P.O. Box 1210
Durant, Ok 74702-1210

Quapaw Tribe Of Oklahoma
Chairman
P O Box 765
Quapaw, Ok 74363

STATE MAILING LIST
UPDATED June 24, 2011

HONORABLE JEFF LANDRY
US HOUSE OF REPRESENTATIVE
(DISTRICT) 3
301 EAST PETER STREET, SUITE 102
NEW IBERIA, LA 70560

DEPT ECONOMIC DEVELOPMENT
OFFICE OF BUSINESS DEVELOPMENT
PO BOX 94185
BATON ROUGE, LA 70804-9185

EXECUTIVE DIRECTOR
LA FORESTRY ASSOC
PO DRAWER 5067
ALEXANDRIA, LA 71301

HONORABLE JOHN FLEMING
US HOUSE OF REPRESENTATIVES
(DISTRICT) 4
6425 YOUREE DRIVE, SUITE 350
SHREVEPORT, LA 71105

DEPT OF AGRI & FORESTRY
OFFICE OF FORESTRY
PO BOX 1628
BATON ROUGE, LA 70821

HONORABLE CHARLES BOUSTANY
US HOUSE OF REPRESNTATIVES
(DISTRICT) 7
800 LAFAYETTE STREET
LAFAYETTE, LA 70501

FEDERAL ACTIVITIES BR (6E-F)
US ENVIRONMAL PROTECTION AGENCY
1445 ROSS AVE, STE 1200
DALLAS, TX 75202-2733

DEPT OF AGRICULTURE & FORESTRY
OFFICE OF SOIL/WATER CONSERV
5825 FLORIDA BLVD
BATONROUGE, LA 70806-4248

HONORABLE RODNEY ALEXANDER
US HOUSE OF REPRESENTATIVES
(DISTRICT) 5
1412 CENTRE COURT, SUITE 402
ALEXANDRIA, LA 71301

HONORABLE STEVE SCALISE
US HOUSE OF REPRESENTATIVES
110 VETERANS BOULEVARD, SUITE 500
(DISTRICT) 1
METAIRIE, LA 70005

DEPT OF CULTURE RECREATION &
TOURISM
DIVISION OF ARCHAEOLOGY
P O BOX 44247
CAPITOL ANNEX 3RD
BATON ROUGE, LA 70804

DEPT OF PUBLIC SAFETY
HIGHWAY SAFETY COMMISSION
PO BOX 66336
BATON ROUGE, LA 70896

HONORABLE WILLIAM CASSIDY
US HOUSE OF RERPESENTATIVES
(DISTRICT) 6
5555 HILTON AVENUE, SUITE 100
BATON ROUGE, LA 70808

MS RUTH JOHNSON
OFFICE OF MANAGEMENT & FINANCE
P O BOX 3776
BATON ROUGE, LA 70821

HONORABLE CEDRIC RICHMOND
US HOUSE OF REPRESENTATIVES
2021 LAKESHORE DRIVE, SUITE 309
(DISTRICT) 2
NEW ORLEANS, LA 70122

LA DEPT OF NATURAL RESOURCES
OFFICE OF CONSERVATION
617 N 3RD STREET
BATON ROUGE, LA 70802

LA GOOD ROADS ASSOCIATION
ATTN: PRESTON EGGERS
646 NORTH ST
BATON ROUGE, LA 70802

KEVIN D NORTON
NATURAL RESOURCES CONS SERVICE
3737 GOVERNMENT ST
ALEXANDRIA, LA 71302

REGION ENVIRONMENTAL OFFICER
SHEILA HOUSTON-PERINE
500 POYDRAS STREET
HALLE BOGGS BLDG. 9TH FLOOR
NEW ORLEANS, LA 70130

LA NATURAL HERITAGE PROGRAM
LA DEPT OF WILDLIFE & FISHERIES
P O BOX 98000
BATON ROUGE, LA 70898

MR MICHAEL BECHDOL
SOURCE WATER PROTECTION (6WQ-S)
ENVIRONMENTAL PROTECTION AGCY
1445 ROSS AVE
DALLAS, TX 75202-2733

US DEPT OF INTERIOR
NATIONAL PARK SERVICE
100 ALABAMA STREET, SW
NPS/ATLANTA FEDERAL CENTER
ATLANTA, GA 30303

LA STATE MINERAL BOARD
P O BOX 2827
BATON ROUGE, LA 70821-2827

DIVISION OF ADMINISTRATION
STATE LAND OFFICE
P O BOX 44124
BATON ROUGE, LA 70804

US DEPT OF THE INTERIOR
OFFICE OF ENVIRONMENTAL
POLICY& COMPLIANCE
1001 INDIAN SCHOOL NW, SUITE 348
ALBUQUERQUE, NM 87104

DEPT OF THE INTERIOR
GEOLOGICAL SURVEY
3535 SOUTH SHERWOOD FOREST, SUITE 120
BATON ROUGE, LA 70806

HONORABLE BUDDY CALDWELL

LA STATE ATTORNEY GENERAL
PO BOX 94005
BATON ROUGE, LA 70804-9095

SENATOR MARY LANDRIEU
UNITED STATES SENATE
707 FLORIDA BLVD
BATON ROUGE, LA 70801

US FISH & WILDLIFE SERVICE
646 CAJUNDOME BLVD, SUITE 400
LAFAYETTE, LA 70506

MR GREG SOLVEY
FEMA REGION VI
800 NORTH LOOP 288
DENTON, TX 76201

SENATOR DAVID VITTER
UNITED STATES SENATE
2800 VETERANS MEMORIAL BLVD
SUITE 201
METAIRIE, LA 70002

ENVIRONMENTAL ASSESSMENT
SIERRA CLUB / DELTA CLUB
PO BOX 19469
NEW ORLEANS, LA 70179-0469

OFFICE OF STATE PARKS
DEPT OF CULTURE REC & TOURISM
PO BOX 44426
BATON ROUGE, LA 70804

US DEPT OF COMMERCE
ECONOMIC DEVELOPMENT ADMN
504 LAVACA STREET, SUITE 1100
AUSTIN, TX 78701-2858

TENNEY SIBLEY
DHH / OPH/ SANITARIAN
PO BOX 4489
BATON ROUGE, LA 70821

DISTRICT COMMANDER
8TH COAST GUARD DISTRICT
HALE BOGGS FEDERAL BUILDING
500 POYDRAS
NEW ORLEANS, LA 70130

DEPT OF HEALTH & HOSPITALS
DIVISON OF ENVIRONMENTAL HEALTH
ATTN: DOUG VINCENT, CHIEF ENGINEER
P O BOX 4489
BATON ROUGE, LA 70821

STEVEN PEYRONNIN, EXECUTIVE DIR.
COALITION TO RESTORE COASTAL LA
P O BOX 1827
BATON ROUGE, LA 70821

MS JOANNA GARDNER
OFFICE OF THE SECRETARY
LA DEPT OF ENVIRONMENTAL QUALITY
P O BOX 4301
BATON ROUGE, LA 70821

CHARLES ST ROMAIN
DIVISION OF ADMINISTRATION
STATE LAND OFFICE
PO BOX 44124
BATON ROUGE, LA 70804

JAMES G WILKINS
SEA GRANT LEAGAL ADVISORY
SERVICE
LOUISIANA STATE UNIVERSITY
227B SEA GRANT BUILDING
BATON ROUGE, LA 70803

FLOODPLAIN MANAGEMENT PGM
DOTD – SANDRA BATTEN
8900 JIMMY WEDELL
BATON ROUGE, LA 70807

MR MARK S DAVIS. DIRECTOR
TULANE INSTITURE ON WATER
6329 FRERET ST. SUITE 355 F
NEW ORLEANS, LA 70118

OFFICE OF INDIAN AFFAIRS
MARK FORD, DIRECTOR
PO BOX 94004
BATON ROUGE, LA 70804-9004

INTER-TRIBAL COUNCIL OF LA, INC
KEVIN BILLIOT, DIRECTOR
8281 GOODWOOD BLVD. SUITE I-2
BATON ROUGE, LA 70808

MR RANDY THIGPEN
3247 EMILY DRIVE
PORT ALLEN, LA 70767

FEDERAL TRANSIT ADM
819 TAYLOR STREET
ROOM: 8A36
FORT WORTH, TX 76102

STATE PLANNING OFFICE
CAPITOL ANNEX BLDG. 2ND FLOOR
PO BOX 94095
BATON ROUGE, LA 70804

CHITIMACHE TRIBE OF LOUISIANA
P.O. BOX 661
CHARENTON, LA 70523

COUSHATTA TRIBE OF LOUISIANA
P.O. BOX 818
ELTON, LA 70532

JENA BAND OF CHOCTAW INDIANS
P.O. BOX 14
JENA, LA 71342

MS BAND OF CHOCTAW INDIANS
P.O. BOX 6257
PHILADELPHIA, MS 39350

TUNICA –BILOXI TRIBE OF LOUISIANA
P.O. BOX 1589
MARKSVILLE, LA 71351

CHOCTAW NATION OF OKLAHOMA
P.O DRAWER 1210
DURANT, OK 74702

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.la.gov
(225-242-4502)

BOBBY JINDAL
GOVERNOR

SHERRI H. LEBAS, P.E.
SECRETARY

February 9, 2012

State Project No. H.001799
F.A.P. No. H.001799
LA 531 Overpass
Route: I-20
Webster Parish

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux 3-7-12
Pam Breaux Date
State Historic Preservation Officer

SUBJECT: **Solicitation of Views**

Early in the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist DOTD with the early identification of possible adverse economic, social, or environmental effects or concerns. Your assistance in this regard will be appreciated.

Due to the earliness of this request for your views, very limited data concerning the proposed project exists. We have, however, attached a sketch map showing the general location of the project, along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by **March 19, 2012.** Replies should be addressed to LA DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply. If you have any questions, please call my office at (225) 242-4502.

Sincerely,

Noel Ardoin, P.E.
Environmental Engineer Administrator

Robert Lott

Robert Lott. PE.
Assistant Environmental Engineer

STL

Attachments
NA/RL/EO
Cc: District Administrator

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date	February 16, 2012
Name	Noel Ardoin
Company	LA DOTD
Street Address	P.O. Box 94245
City, State, Zip	Baton Rouge, LA 70804-9245
Project	State Project No. H.001799 LA 531 Overpass
Project ID	882012
Invoice Number	12021602

Personnel of the Habitat Section of the Coastal & Non-Game Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

Carlen Miche

for Amity Bass, Coordinator
Natural Heritage Program

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

INVOICE

RETURN THIS COPY OF INVOICE WITH PAYMENT

Date	February 16, 2012
Invoice Number	12021602
Project	State Project No. H.001799 LA 531 Overpass
Name	Noel Ardoin
Company	LA DOTD
Street Address	P.O. Box 94245
City, State, Zip	Baton Rouge, LA 70804-9245
Number of Quads Reviewed	1
Total Due	$0.00

Payment should be made to "Louisiana Department of Wildlife & Fisheries" within 30 days of the date of this invoice. Please include the invoice number on your check and return a copy of this invoice with your remittance to the following address:

Louisiana Department of Wildlife & Fisheries
Attn: Jennifer Riddle
P.O. Box 80399
Baton Rouge, LA 70898-0399

Should you have any questions regarding this invoice, for review of the Louisiana Natural Heritage database for information on known sensitive elements at a charge of $20.00 per quad reviewed, please contact LNHP at (225) 765-2357.

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

INVOICE

RETAIN THIS COPY FOR YOUR RECORDS

Date	February 16, 2012
Invoice Number	12021602
Project	State Project No. H.001799 LA 531 Overpass
Name	Noel Ardoin
Company	LA DOTD
Street Address	P.O. Box 94245
City, State, Zip	Baton Rouge, LA 70804-9245
Number of Quads Reviewed	1
Total Due	$0.00

Payment should be made to "Louisiana Department of Wildlife & Fisheries" within 30 days of the date of this invoice. Please include the invoice number on your check and return a copy of this invoice with your remittance to the following address:

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DEPARTMENT OF THE ARMY
VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO
ATTENTION OF:

February 21, 2012

Regional Planning and
Environment Division South
Quality Controls and
Administration

Mr. Noel Ardoin
Environmental Engineer Administrator
Louisiana Department of
Transportation and Development
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

Dear Mr. Ardoin:

I refer to your letter of February 9, 2012, regarding replacement of the existing LA 531 overpass at Interstate 20, Webster Parish, Louisiana (State Project No. H.001799). The U.S. Army Corps of Engineers, Vicksburg District, has no ongoing or proposed activities in the project area.

If your proposed work involves the discharge of dredged or fill material into wetlands or any other waters of the United States, you may need a Department of the Army permit prior to construction. For further information, please visit our website at http://www.mvk.usace.army.mil/offices/od/odf or contact Mr. David Lofton (telephone (601) 631-5147).

I trust this information meets your needs. If you have any further questions, please contact Mr. Brian LaBarre of this office (telephone (601) 631-5437).

Sincerely,

Patricia R. Hemphill

Patricia R. Hemphill, P.E.
Assistant Chief, Programs and
Project Management Division

U.S. Department of Homeland Security

United States Coast Guard

Commander
Eighth Coast Guard District

1222 Spruce Street
St. Louis, MO 63103-2832
Staff Symbol: dwb
Phone: (314) 269-2379
Fax: (314) 269-2737
Email: rodney.l.wurgler@uscg.mil
www.uscg.mil/d8/westernriversbridges

16591.1/Webster Parish, LA
March 5, 2012

Ms. Noel Ardoin
Environmental Engineer Administrator
State of Louisiana, DOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245

Subj: LA 531 OVERPASS, PROJECT H.001799, WEBSTER PARISH

Dear Ms. Ardoin:

We received your letter dated February 9, 2012. The proposed project at the above referenced location crossing may necessitate the Coast Guard's involvement in the permitting process. Under 23 CFR §650.805, the Federal Highway Administration (FHWA) has the responsibility under the Surface Transportation Assistance (STA) Act of 1978 to determine whether or not a USCG permit is required for bridge construction.

Section 144(h) of Title 23 U.S. Code was enacted in 1978 to reduce paperwork and related costs in the execution of the Coast Guard's bridge permit programs. This section has been amended by the Act of April 2, 1987 (Public Law 100-17), to further reduce paperwork and related costs in the permitting of bridges funded by this Act. By reason of this provision, certain bridges -- which are constructed, reconstructed, rehabilitated, or replaced with federal assistance imposed under Title 23 U.S. Code -- are no longer subject to the permitting requirements imposed under 33 U.S.C. 401 and 525(b). The bridges that fall into this excluded category are those that cross waterways:

a. which are not used and are not susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce; and

b. which are non-tidal, or if tidal, used by vessels less than 21 feet in length.

Since FHWA has the responsibility for the STA Act, the Coast Guard will accept a determination by the FHWA Administrator that a bridge project receiving federal assistance under Title 23 U.S. Code meets the stated criteria and is exempted for Coast Guard Bridge Administration purposes. This letter does not imply that this project meets the criteria above and does not constitute concurrence as meeting the criteria. Coordination between FHWA and the Coast Guard is required prior to FHWA reaching a determination that the bridge or bridges are eligible under the applicable statutes.

It must be noted that the subject Act which amended Title 23 U.S. Code to include 23 U.S.C. 144(h), did not exclude that category of bridges from the application of 14 U.S.C.85. The later statute requires the establishment, maintenance, and operation of Coast Guard required lights and signals on fixed structures, including bridges. Approval of lights and other signals required under the provisions of 33 CFR 118 should be obtained, prior to the commencement of construction, from this office. If it is determined that federal funds will not be utilized, additional information may be required to determine whether a Coast Guard permit will be required.

If we can be of further assistance, please contact this office.

Sincerely,

ERIC A. WASHBURN
Bridge Administrator, Western Rivers
By direction of the District Commander

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.la.gov
225-379-3005

BOBBY JINDAL
GOVERNOR

SHERRI H. LEBAS, P.E.
SECRETARY

April 2, 2012

STATE PROJECT NO.: H.001799
F.A.P. NO.: H.001799
PROJECT DESCRIPTION: LA 531 OVERPASS
ROUTE: I-20
PARISH: WEBSTER

Ms. Noel Ardoin
Environmental Engineer Administrator
LADOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245

Subject: Solicitation of Views

Dear Ms. Ardoin:

Enclosed is a copy of the Flood Insurance Rate Map (FIRM) for Webster Parish, which includes the City of Minden, indicating the proposed project.

During and after the project consideration must be given for the occurrence of a base flood inundation. At this time, consideration should also be given to the responsibility for clearing debris and keeping the area cleared so as not to interfere with its function.

In order to assure compliance with the National Flood Insurance Program (NFIP), and ensure that appropriate permits are obtained, please contact the floodplain administrator for Webter Parish and the City of Minden. The contact persons are listed respectively: Ms. Rhonda Carnahan, P.O. Box 389, Minden, LA 71055 and telephone no. 318-377-7564, Mr. Brent Cooley, P.O. Box 580, Minden, LA 71058 and telephone no. 318-377-2144.

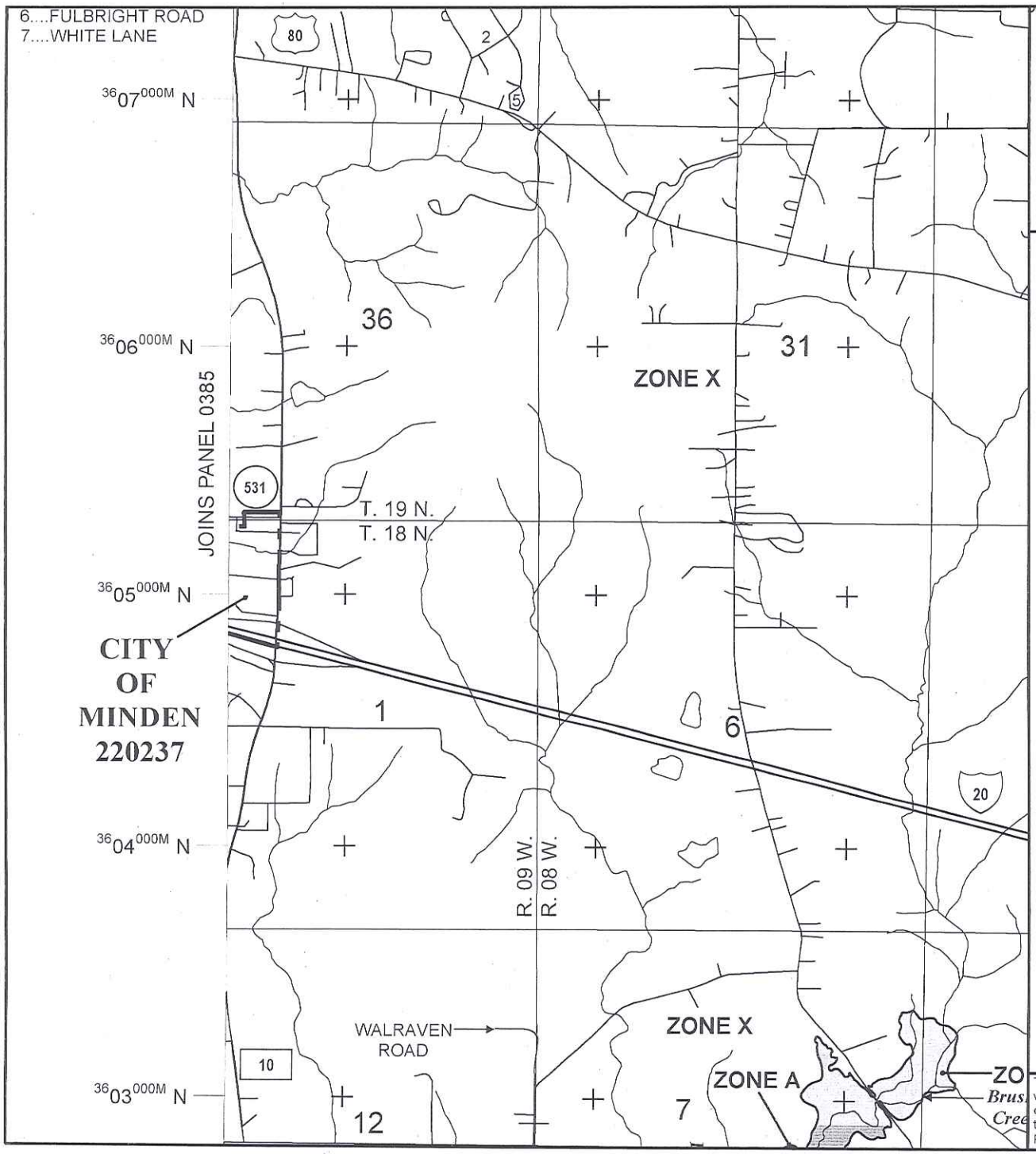
We thank you for the opportunity to comment on this project. If you need additional information, please contact our office, (225) 379-3005.

Sincerely,

Susan Veillon

Susan Veillon, CFM
Floodplain Management Program Coordinator

pc: Ms. Rhonda Carnahan
Mr. Brent Cooley



MAP SCALE 1" = 2000'

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0425E

FIRM

FLOOD INSURANCE RATE MAP

WEBSTER PARISH, LOUISIANA
AND INCORPORATED AREAS

PANEL 425 OF 500
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

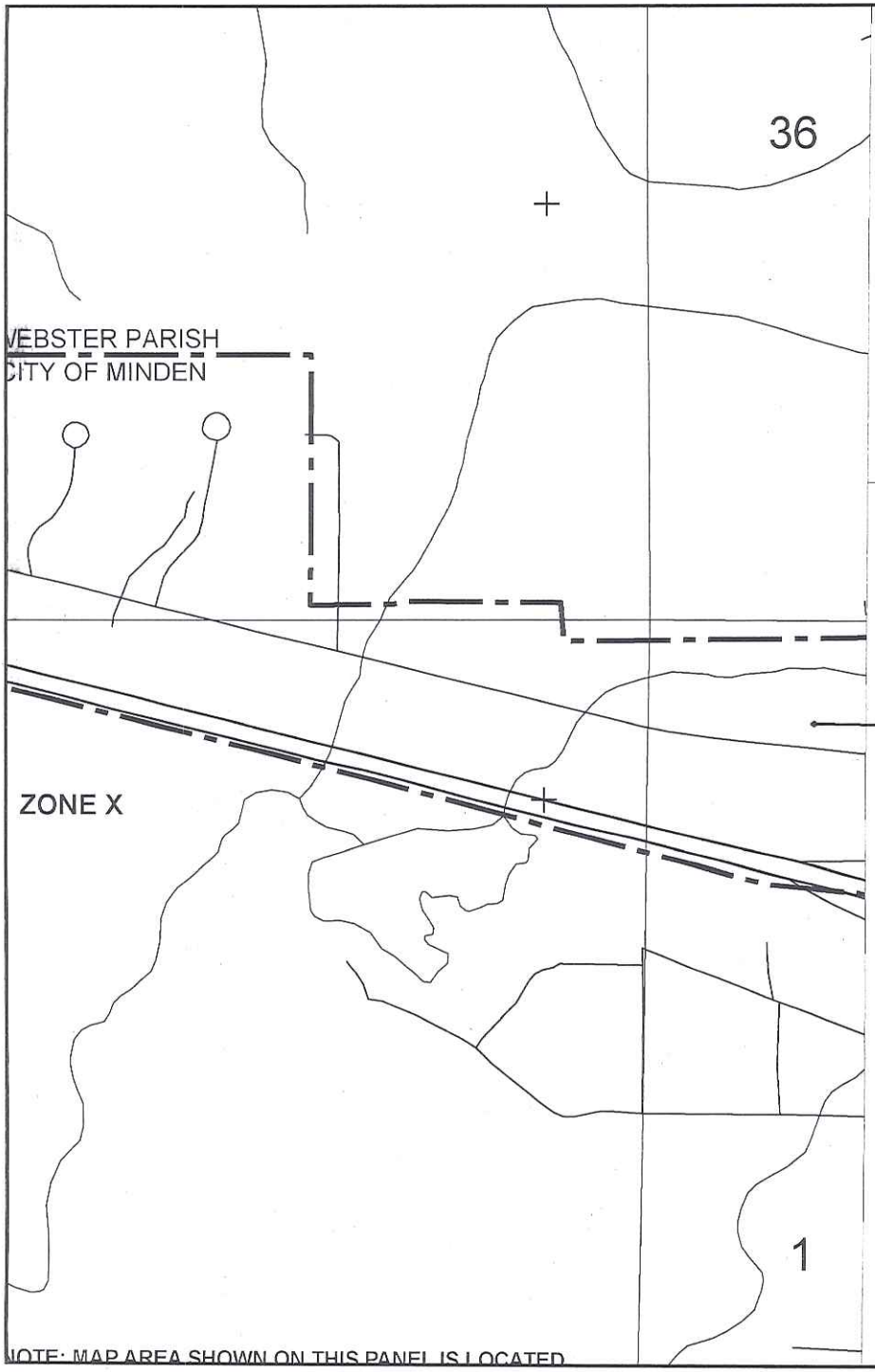
COMMUNITY	NUMBER	PANEL	SUFFIX
MINDEN, CITY OF	220237	0425	E
WEBSTER PARISH	220357	0425	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
22119C0425E
EFFECTIVE DATE
MARCH 2, 2010

Federal Emergency Management Agency

MAP 1



Map 2

MAP SCALE 1" = 1000'

0 0 1000 2000

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0385E

FIRM

FLOOD INSURANCE RATE MAP

WEBSTER PARISH, LOUISIANA AND INCORPORATED AREAS

PANEL 385 OF 500
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MINDEN, CITY OF	220237	0385	E
WEBSTER PARISH	220357	0385	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
22119C0385E
EFFECTIVE DATE
MARCH 2, 2010

Federal Emergency Management Agency

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7751
Fax: (318) 473-7626

March 22, 2012

LA DOTD,Environmental Engineer Administrator
P.O Box 94245
Baton Rouge, Louisiana 70804-9245

RE: LA 531 Overpass State Project No. H.001799

Dear Noel Ardoin:

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resource Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The project map submitted with your request indicates that the proposed construction areas will not impact prime farmland and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. Furthermore, we do not predict impacts to NRCS work in the vicinity.

For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location: http://websoilsurvey.nrcs.usda.gov/

Please direct all future correspondence to me at the address shown above.

Respectfully,

Sarah Haymaker
Acting State Conservationist

Bobby Jindal
GOVERNOR

Bruce D. Greenstein
SECRETARY

State of Louisiana

Department of Health and Hospitals
Office of Public Health

March 21, 2012

LA DOTD
Environmental Engineer Administrator
P.O. Box 94245
Baton Rouge, LA 70804-9245

Re: State Project No. H.001799; LA 531 overpass over I-20; Webster Parish.

This office is in receipt of a Solicitation of View regarding the above referenced project(s).

Based upon the information received from your office we have no objection to the referenced project(s) at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable). Furthermore, should additional project data become available to this office that in any way amend the information upon which this office's response has been based, we reserve the right of additional comment on the referenced project(s).

In the event of any future discovery of evidence of non-compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any applicable public health laws or statutes which may have escaped our awareness during the course of this cursory review, please be advised that this office's preliminary determination on this Solicitation of View of the project(s) shall not be construed as absolving the applicant of responsibility, if any, with respect to compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any other applicable public health laws or statutes.

Respectfully,

Johan Forsman
Geologist
Louisiana Department of Health and Hospitals, Office of Public Health
Center for Environmental Health Services
Telephone: (225) 342-7309
Electronic mail: johan.forsman@la.gov

Ezekiel Onyegbunam

From: Noel Ardoin
Sent: Wednesday, February 29, 2012 12:28 PM
To: Ezekiel Onyegbunam
Subject: FW: DEQ SOV 120216/0410 LA 531 Overpass Replacement

From: Beth Altazan-Dixon
Sent: Wednesday, February 29, 2012 12:20 PM
To: Noel Ardoin
Subject: DEQ SOV 120216/0410 LA 531 Overpass Replacement

February 29, 2012

Noel Ardoin, Environmental Engineering Administrator
LA DOTD
PO Box 94245
Baton Rouge, LA 70804-9245
Noel.Ardoin@la.gov

RE: 120216/0410 LA 531 Overpass Replacement
H.001799 LADOTD Funding
Webster Parish

Dear Ms. Ardoin:

The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

- Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.
- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-3181 to determine if your proposed project requires a permit.
- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than June 1, 2011. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx or by contacting the LDEQ Water Permits Division at (225) 219- 3181.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are

advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.

- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, Webster Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3958 or by email at beth.dixon@la.gov.

Sincerely,

Beth

Beth Altazan-Dixon, EPS III
Performance Management
LDEQ/Office of the Secretary
Business and Community Outreach and Incentives Division
P.O. Box 4301 (602 N. 5th Street)
Baton Rouge, LA 70821-4301
Phone: 225-219-3958
Fax: 225-325-8148
Email: ***beth.dixon@la.gov***

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

February 21, 2012

Ms. Noel A. Ardoin
Environmental Engineer Administrator
LADOTD
P.O. Box 94245
Baton Rouge, LA 70804-9245

Dear Ms. Ardoin:

We have received your February 9, 2012, letter requesting our evaluation of the potential environmental impacts that might result from the following project:

STP No. H.001799
FAP No. H.001799
Replace Overpass
LA 531 over Interstate 20
Webster Parish, Louisiana

In administering the sole source aquifer (SSA) program under Section 1424 of the Safe Drinking Water Act our Office performs evaluations of projects with federal financial assistance which are located over a designated sole source aquifer.

Based on the information provided, we have concluded that the project do not lie within the boundaries of a designated sole source aquifer and is thus not eligible for review under the SSA program.

If you did not include the Parish/County; a legal description; project location and the latitude and longitude if available, please do so in future Sole Source Aquifer correspondence.

If you have any questions on this letter or the sole source aquifer program please contact me at (214) 665-7133.

Sincerely yours,

Michael Bechdol, Coordinator
Sole Source Aquifer Program
Ground Water/UIC Section

cc: Jesse Means, LDEQ

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.la.gov
(225-242-4502)

BOBBY JINDAL
GOVERNOR

SHERRI H. LEBAS, P.E.
SECRETARY

February 9, 2012

State Project No. H.001799
F.A.P. No. H.001799
LA 531 Overpass
Route: I-20
Webster Parish

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act). The project, as proposed,
( ) Will have no effect on those resources
(X) Is not likely to adversely affect those resources. LAW
This finding fulfills the requirements under Section 7(a)(2) of the Act.

Acting Supervisor
Louisiana Field Office
U.S. Fish and Wildlife Service

Feb 24 2012
Date

SUBJECT: **Solicitation of Views**

Early in the planning stages of a transportation facility, views from federal, state, and local agencies, organizations, and individuals are solicited. The special expertise of these groups can assist DOTD with the early identification of possible adverse economic, social, or environmental effects or concerns. Your assistance in this regard will be appreciated.

Due to the earliness of this request for your views, very limited data concerning the proposed project exists. We have, however, attached a sketch map showing the general location of the project, along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by **March 19, 2012.** Replies should be addressed to LA DOTD; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number in your reply. If you have any questions, please call my office at (225) 242-4502.

Sincerely,

Noel Ardoin, P.E.
Environmental Engineer Administrator

Robert Lott

Robert Lott. PE.
Assistant Environmental Engineer

STL

Attachments
NA/RL/EO
Cc: District Administrator

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

SCOTT A. ANGELLE
SECRETARY

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

March 14, 2012

TO: Ms. Noel Ardoin
Environmental Engineer Administrator
LADOTD
P. O. Box 94245
Baton Rouge, Louisiana 70804-9245

RE: Solicitation of Views
State Project No. H.001799
Federal Aid Project No. H.001799
LA 531 Overpass
Route: I-20
Webster Parish

Dear Ms. Ardoin:

In response to your letter dated February 9, 2012, concerning the referenced matter, please be advised that the Office of Conservation collects and maintains many types of information regarding oil and gas exploration, production, distribution, and other data relative to the petroleum industry as well as related and non-related injection well information, surface mining and ground water information and other natural resource related data. Most information concerning oil, gas and injection wells for any given area of the state, including the subject area of your letter can be obtained through records search via the SONRIS data access application available at:

http://www.dnr.louisiana.gov

A review of our computer records for the referenced project area indicates no oil, gas or injection wells located in the proposed project area. Furthermore, the DNR water well database indicates no registered water wells located in the vicinity of the project area. However, unregistered water wells may be located in the area.

The Office of Conservation maintains records of all activities within its jurisdiction in paper, microfilm or electronic format. These records may be accessed during normal business hours, Monday through Friday, except on State holidays or emergencies that require the Office to be closed. Please call 225-342-5540 for specific contact information or for directions to the Office of Conservation, located in the LaSalle Building, 617 North Third Street, Baton Rouge, Louisiana. For pipelines and other underground hazards, please contact Louisiana One Call at 1-800-272-3020 prior to commencing operations. Should you need to direct your inquiry to any of our Divisions, you may use the following contact information:

Division	Contact	Phone No.	E-mail Address
Engineering	Jeff Wells	225-342-5638	jeff.wells@la.gov
Pipeline	Steven Giambrone	225-342-2989	steven.giambrone@la.gov
Injection & Mining	Laurence Bland	225-342-5515	laurence.bland@la.gov
Geological	Mike Kline	225-342-3335	mike.kline@la.gov
Environmental	Gary Snellgrove	225-342-7222	gary.snellgrove@la.gov

If you have difficulty in accessing the data via the referenced website because of computer related issues, you may obtain assistance from our technical support section by selecting Help on the SONRIS tool bar and submitting an email describing your problems and including a telephone number where you may be reached.

Sincerely,

James H. Welsh
Commissioner of Conservation

JHW:MBK

Department of Children & Family Services
Building a Stronger Louisiana

Undersecretary
Division of Management and Finance
627 North 4th Street
Baton Rouge, LA 70802

(O) 225.342.0805
(F) 225.342.8636
www.dcfs.la.gov

Bobby Jindal, Governor
Ruth Johnson, Secretary

March 8, 2012

Mr. Noel Ardoin
Environmental Engineer Administrator
Department of Transportation & Development
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Re: Solicitation of Views
State Project # H.001799
LA 531 Overpass;Route I-20
Webster Parish

Dear Mr. Ardoin:

The Department of Children and Family Services has reviewed the proposed project information supplied in the parish of Webster Solicitation of Views. We have determined that the project will not adversely impact the operations of our agency or the delivery of services to our consumers who reside in the affected area.

We offer no objection to this undertaking and look forward to its successfully completion.

Sincerely,

Richard Howze

Richard Howze
Undersecretary

RH: sg

Jena Band of Choctaw Indians

P. O. Box 14 • Jena, Louisiana 71342-0014 • Phone: 318-992-2717 • Fax: 318-992-8244

February 24, 2012

State of Louisiana
Department of Transportation and Development
P.O. Box 94245
Baton Rouge, Louisiana 70804

SUBJECT: State project No: H. 001799
F.A.P. NO: H.001799
LA: 531 Overpass
Route: I-20
Webster Parish, Louisiana

COMMENTS: We are not aware of any sacred and/or ceremonial sites located within the immediate area. However, if at any time during the scope of said project, there are any inadvertent discoveries of human remains, pottery, or other culturally significant artifacts found, please notify our office immediately.

Sincerely,

Dana Masters
THPO

\
P.O. Box 14
Jena, LA 71342

Ph: 318-992-1205
FAX: 318-992-8244

Choctaw Nation of Oklahoma

P.O. Box 1210 • Durant, OK 74702-1210 • (580) 924-8280

Gregory E. Pyle
Chief

Gary Batton
Assistant Chief

March 19, 2012

LA DOTD
Environmental Engineer Administration
Attn: Noel Ardoin, P.E.
P.O. Box 94245
Baton Rouge, LA 70804-9245

RE: State Project No. H.001799, proposed project replacing existing LA 531 overpass at Interstate 20 in Webster Parish, LA.

Dear Mr. Ardoin,

Thank you for your correspondence regarding State Project No. H.001799, proposed project replacing existing LA 531 overpass at Interstate 20 in Webster Parish, LA. This project is located in the historic areas of interest for the Choctaw Nation of Oklahoma. Before we can comment on the likelihood of this project affecting Choctaw historic or sacred sites, we request a letter from the Louisiana SHPO, indicating that there are no known archaeological sites located within the project area and that the project area has low archaeological potential.

Please contact me with any question or concerns. Thank you.

Sincerely,

Director, Historic Preservation Department
Tribal Archaeologist, NAGPRA Specialist
Choctaw Nation of Oklahoma
PO Drawer 1210
Durant, OK 74701

By: _____
Johnnie Jacobs
Section 106 Coordinator
jjacobs@choctawnation.com

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245
Baton Rouge, Louisiana 70804-9245
www.dotd.louisiana.gov
(225) 242-4502

BOBBY JINDAL
GOVERNOR

SHERRI H. LEBAS, P E
SECRETARY

April 26, 2013

STATE PROJECT NO: H.001799/ (452-03-0047)
F.A.P. NO: H001799/ [BHI-20-1(213)]
LA 531 OVERPASS
I-20
WEBSTER PARISH

Ms. Pam Breaux
Deputy State Historic Preservation Officer
Department of Culture, Recreation and Tourism
Office of Cultural Development
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

Via E-Mail to: Section 106@crt.state.la.us

SUBJECT: No Historic Properties Affected

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux 1 May 2013
Pam Breaux Date
State Historic Preservation Officer

Dear Ms. Breaux:

The Louisiana Department of Transportation and Development (DOTD) proposes a project to widen portions of LA 531 and to replace an overpass bridge (structure no. 04601110203321) at I-20 in Webster Parish, approximately 3 miles east of Minden, La. (see attached map). The bridge replacement project Section 106 review and request for SHPO concurrence was the subject of a letter sent to your office on March 26, 2012. SHPO concurrence was received on April 17, 2012 (see attached SHPO concurrence). However the project description has been revised. The proposed project would include the previously concurred upon bridge replacement with a 4-lane concrete deck and steel rolled beam bridge, with the addition of a multi-lane roundabout at the intersection of LA 531 and Industrial Drive, and a second multi-lane roundabout at the intersection of LA 531 and the I-20 eastbound ramp. Also, the portion of LA 531 from the I-20 eastbound ramps to Jimmy Batton/Taylor Road would be widened at the northbound approach to the interchange.

In the previous letter, the Area of Potential Effects (APE) for the bridge replacement was the .941 acres of additional ROW required; however the project's revision requires an additional .69 acre of ROW on LA 531, north of I-20 between the intersection of LA 531 and Industrial Road and LA 531 and Flourney Road (see aerial Map). The new total required ROW would be 1.631 acres. The Louisiana Divisions of Archaeology and Historic Preservation GIS database was reviewed in order to determine if there were any previously recorded standing structures, districts or archaeological sites listed or deemed eligible for

inclusion or on the National Register of Historic Places (NRHP) within or adjacent to the revised APE. None were identified within or adjacent to the project area. None were apparent.

The proposed project area along a commercial corridor has been previously disturbed due to the installations of utility lines and ditches. Within the APE at the intersection of LA 531 and Industrial Rd. on the west side, is a sloping mowed drainage ditch area, adjacent to a fenced pastoral area with graveled drives also within the APE. The portion of APE on the east side consists of a similar ditch area as the west side and a cemented driveway accessible to a Shell gas station (see Figure 1). Due to the amount of previous ground disturbance introduced by the installation of ditches and buried utilities and the lack of previously recorded archaeological sites in this location, an archaeological site visit was not conducted. DOTD believes the project will not impact archaeological resources.

DOTD, in conjunction with FHWA, believe that no Historic Properties will be affected by the proposed project. We request your concurrence. If you have any questions or comments, please call Sharon Gage at (225) 242-4515.

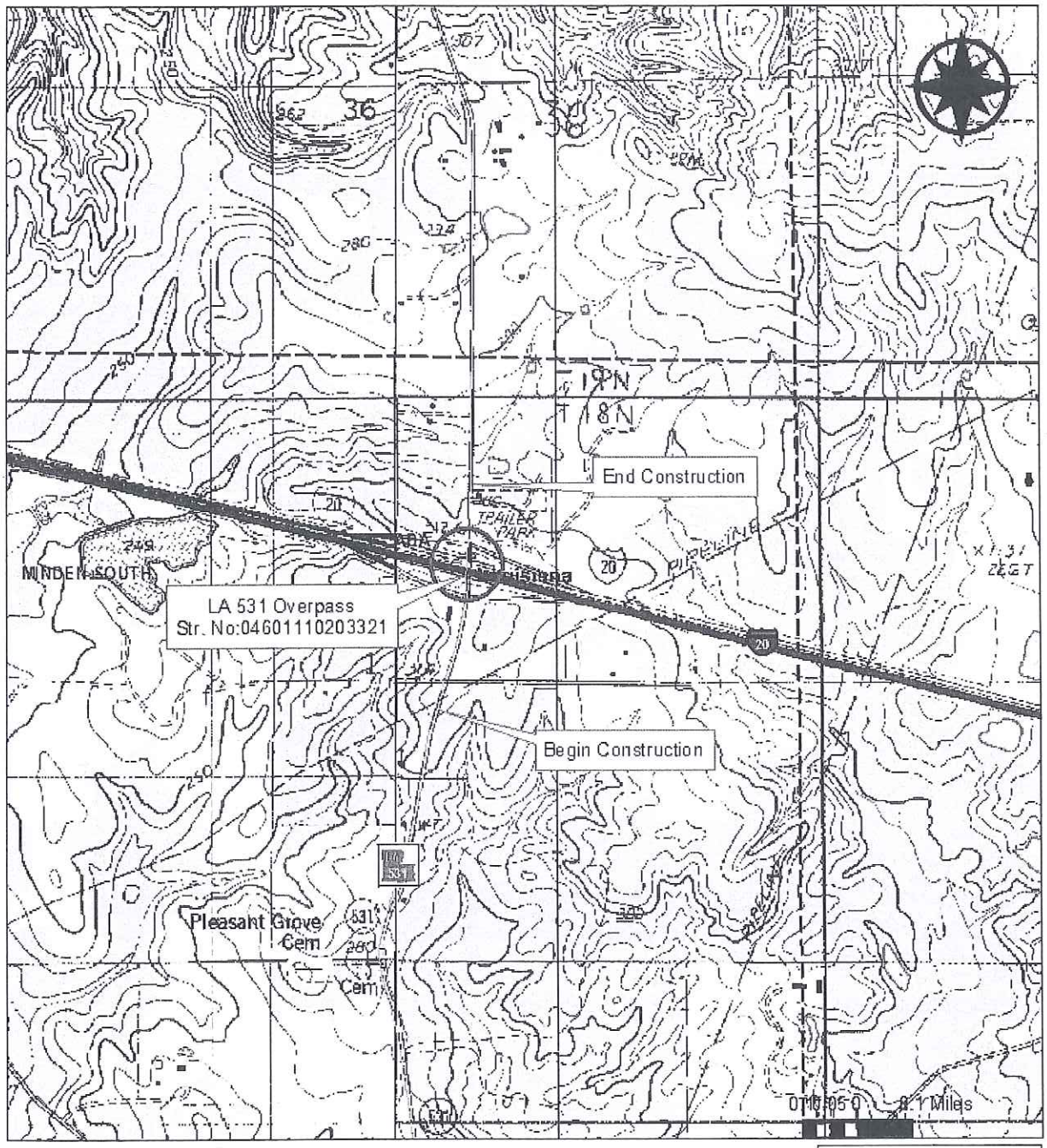
Sincerely,

for

Digitally signed by Carey Coxe2
DN: cn=Carey Coxe2, o=LADOTD, ou=Section 28, email=carey.coxe@la.gov, c=US
Date: 2013.04.26 08:14:33 -05'00'

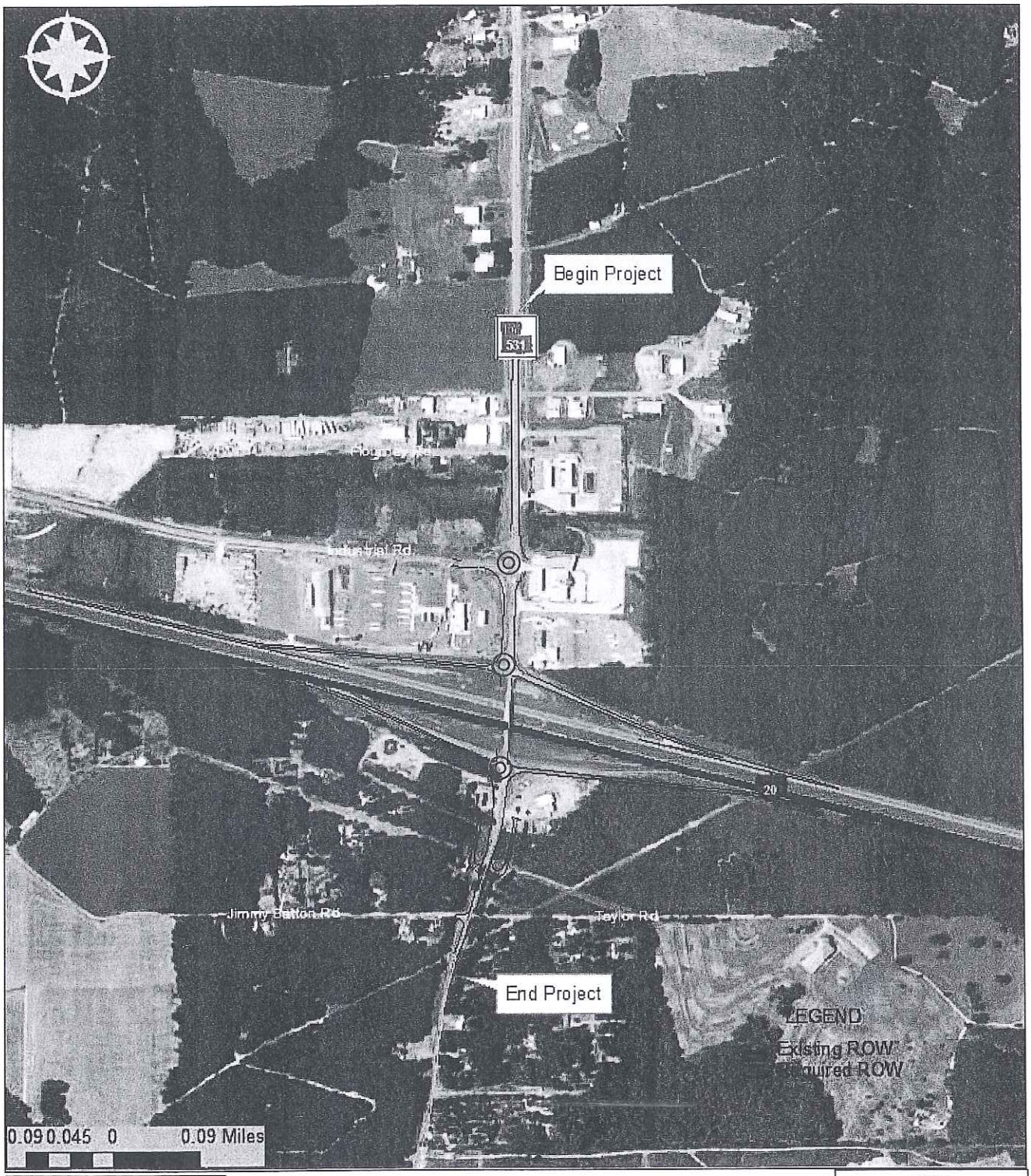
Noel Ardoin
Environmental Engineer Administrator

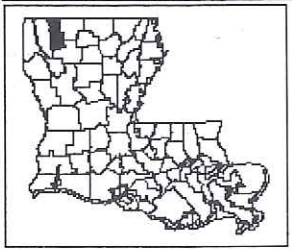
Attachment
NA/sg
cc: Mr. Ezekiel Onyegbunam
SHPO File
FHWA



STATE PROJECT No.:H.001799/ (452-03-0047)
FEDERAL AID PROJECT No.: H001799/ [BHI-20-1(213)]
LA 531 OVERPASS
I-20
WEBSTER PARISH
MINDEN SOUTH 7.5' USGS QUAD MAP

MAP





STATE PROJECT No.:H.001799/ (452-03-0047)
FEDERAL AID PROJECT No.: H001799/ [BHI-20-1(213)]
LA 531 OVERPASS
I-20
WEBSTER PARISH
MINDEN SOUTH 7.5' USGS QUAD MAP

LOUISIANA'S ON THE MOVE... DOTD BUILDS THE WAY

AERIAL MAP

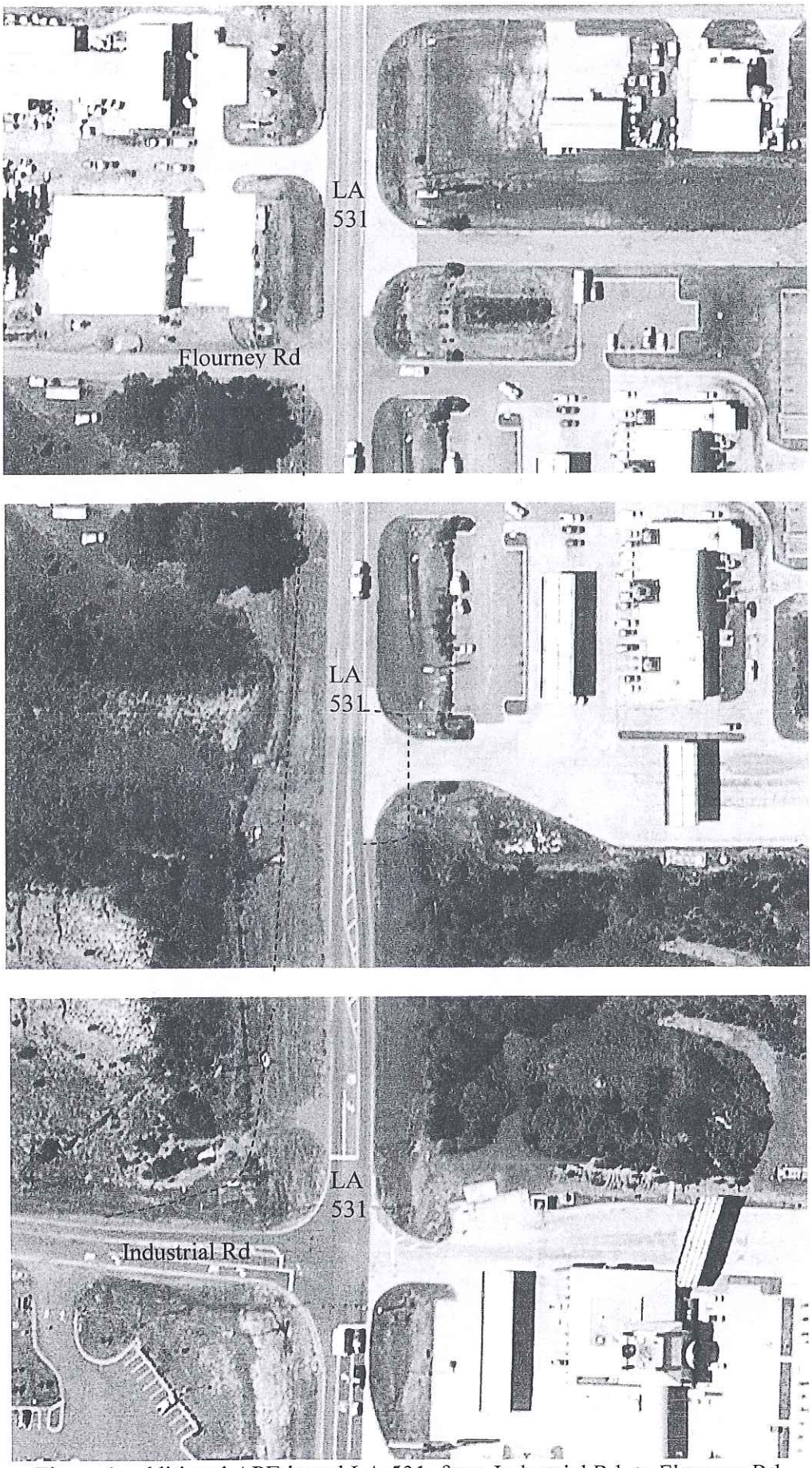


Figure 1. additional APE in red LA 531, from Industrial Rd. to Flourney Rd.

APPENDIX B

Wetland Finding

WETLAND ANALYSIS REPORT

STATE PROJECT NO. H.001799
FEDERAL AID NO. H001799
LA 531 OVERPASS AT I-20
ROUTE LA 531
WEBSTER PARISH

INTRODUCTION

The following wetland report is prepared in accordance with Executive Order 11990 and D.O.T. Order 5660.1. The *Army Corps of Engineers' 1987 Manual* and *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (with subsequent clarification memoranda), along with on-site field investigations, were utilized to determine the presence of jurisdictional wetlands within the project termini, and to delineate the wetland boundaries, if present. This report dated April 17, 2012 is a revision to the original wetland analysis report of March 6, 2012, required due to plan revisions which include the addition of three roundabouts.

The proposed project calls for the replacement of the existing LA 531 Overpass at I-20 located in Webster Parish. The bridge (Structure No. 046001110203321) is located at 32.580531, -93.248003 DD; Township T18N, Range R09W, Sections 1 and 2. The existing bridge is 302 feet long with a 24-foot clear roadway width. Constructed in 1960, the structure is a Composite Welded Beam and Concrete bridge composed of six spans. The structure has a sufficiency rating of less than 50; therefore, the project qualifies for federal bridge replacement funds. The project calls for replacement with a new structure that meets current design criteria.

According to the plans, the proposed new bridge will be 262 feet long with an 80-foot clear roadway consisting of three 12-foot travel lanes, two 8-foot shoulders, and a 16-foot striped median. The new bridge will be a Continuous Steel Girder bridge that will utilize two 131-foot continuous girder spans and two 40-foot concrete approach slabs, one at each end. The proposed project will be constructed along the existing alignment. The proposed project includes widening and improvement to the LA 531 approaches to accommodate the new bridge structure. Improvements to LA 531 will also include the construction of three roundabouts. In addition, the existing I-20 on and off ramps will be reconstructed to meet current design guidelines and to accommodate the requirements of future traffic volumes and movements. LA 531 and I-20 will remain open during construction, thru and local traffic will be maintained at all times, and interstate ramps will remain functional. Overall project length will be approximately 0.718 miles along LA 531 and 1.156 miles along I-20.

Additional construction work will consist of earthwork, excavation and fill, embankment, drainage structures, three roundabouts, base course, and roadway. Additional right-of-way will be required. The project limits encompass an approximate total of 65.10 acres, which consists of 56.96 acres of existing right-of-way and 8.14 acres required right-of-way.

METHOD

U.S. Geological Survey (USGS) topographic quadrangle maps and aerial photographs were reviewed prior to the initiation of field work to identify the potential extent of wetlands present along the proposed alignment. The *Soil Survey of Webster Parish* produced by the USDA was utilized to determine what type of soils might be expected at the proposed site. The approximate centerline of the alignment was traversed to insure adequate coverage. Sites with wetland potential were investigated.

Routine Wetland Determination Data Forms, as approved by Headquarters, U.S. Army Corps of Engineers 1/09 Interim Version, were completed for each plant community encountered along the proposed alignments. These data forms contain sufficient information regarding the presence or absence of hydric soils, hydrophytic vegetation, and wetland hydrology, to support the demarcation of a wetland boundary.

Dominant vegetation was recorded on the data forms along with the indicator status as listed in the *National List of Plant Species Occurring in Wetlands (Region 2)* published by the U.S. Fish and Wildlife Service. Once dominant vegetation was recorded and evaluated, if more than 50 percent of the dominant vegetation had an indicator status of FAC, FACW, or OBL, the hydrophytic vegetation criterion was recorded as met.

A soil pit was excavated to a depth of approximately 16 inches at each sample site. The pit remained open for at least 15 minutes to allow the pit to fill with water, if present. Soils were sampled directly below the A horizon, or 10 inches, whichever was shallower. Information recorded on the data forms included soil colors (hue, value, and chroma as per the 1992 revised edition of the Munsell Color Chart), size, abundance, and depth of mottles, as well as the soil texture. Soil texture was determined using the "texture by feel" analysis.

Wetland hydrology indicators were also recorded at each sample site as per the data form requirements. If a sample site indicated the presence of at least one primary or two secondary hydrology indicators, the area was assumed to have wetland hydrology.

Photographs were taken at potential wetlands sites, as well as at potential other waters of the US sites. These photographs show vegetation in each plant stratum (tree, sapling/shrub, and herbaceous vegetation when present) and a representative soil profile.

The unnamed stream, located within the Loggy Bayou Watershed (HUC 11140203), drains into Bayou Dorcheat, which drains into Lake Bistineau, which drains into Loggy Bayou, which drains into the Red River.

RESULTS

Potential Jurisdictional Wetlands

SITE 1 WL: This site includes an area along LA 531, north of I-20, within the project limits, which borders an unnamed stream, outside of the existing roadbed (32.583583, -93.248122 DD). The dominant vegetation consists of *Salix nigra* (black willow), *Baccharis halimifolia* (Eastern baccharis), *Pinus taeda* (loblolly pine), *Rubus betulifolius* (blackberry), *Andropogon glomeratus* (bushy bluestem), and *Solidago gigantea* (giant goldenrod). One hundred percent (100%) of the dominant species have wetland indicators. Wetland hydrology indicators include saturation, drainage patterns, and FAC-neutral test. A soil pit revealed that the matrix of the soil layers displayed low-chroma colors, which is indicative of a depleted matrix. The area meets all three requirements indicating that wetlands are present. The **estimated area of wetlands** that will be impacted is approximately **0.36 acres**.

SITE 2 WL: This site includes an area along I-20, west of LA 531, within the project limits, which borders an unnamed pond, outside of the existing roadbed (32.581742, -93.255761 DD). The dominant vegetation consists of *Salix nigra* (black willow), *Liquidambar styraciflua* (sweet gum), *Quercus nigra* (water oak), *Sambucus canadensis* (elderberry), *Ilex vomitoria* (yaupon holly), *Juncus effusus* (soft rush), *Smilax laurifolia* (laurel-leaf greenbriar), and *Smilax glauca* (Cat greenbrier). One hundred percent (100%) of the dominant species have wetland indicators. Wetland hydrology indicators include high water table, saturation, water marks, sediment deposits, hydrogen sulfide odor, drainage patterns, and FAC-neutral test. A soil pit revealed that the matrix of the soil layers displayed low-chroma colors, which is indicative of a depleted matrix. The area meets all three requirements indicating that wetlands are present. The **estimated area of wetlands** that will be impacted is approximately **1.62 acres**.

Potential Jurisdictional Other Waters of the U.S.

SITE 1 OW: This site consists of the portion of an unnamed stream within the project limits located along LA 531 at 32.583583, -93.248122 DD. The unnamed stream is characterized by a defined bank line and an obvious ordinary high water mark, and has a water depth and inundation period that is not conducive to hydrophytic vegetation growth. The **estimated area of Other Waters** of the U.S. that will be impacted is **approximately 0.03 acres**.

SITE 2 OW: This site consists of the portion of an unnamed stream and pond within the project limits located along I-20 at 32.581742, -93.255761 DD. The unnamed stream is characterized by a defined bank line and an obvious ordinary high water mark, and has a water depth and inundation period that is not conducive to hydrophytic vegetation growth. The **estimated area of Other Waters** of the U.S. that will be impacted is **approximately 0.20 acres**.

SUMMARY

Following a thorough examination of the available project information and the proposed project site, it is the professional opinion of LA DOTD biologists that portions of the project site satisfy the criteria to be jurisdictional wetlands pursuant to the *Army Corps of Engineers' 1987 Manual* (or 2010 *Regional Supplement*) with subsequent clarification memoranda and pursuant to confirmation by the Army Corps of Engineers. It is our conclusion that the proposed project will impact a total of **approximately 1.98 acres of jurisdictional wetlands** and **approximately 0.23 acres of jurisdictional Other Waters of the U.S.**

MITIGATION

The Department will mitigate the wetlands being impacted by construction activities for this project by minimizing impacts as listed in the Department's Standard Specification and mitigate for lost wetland habitats by reseeding with the appropriate plants and seedlings. In addition, the Department will coordinate appropriate mitigation planned with the Corps of Engineers.

In an effort to minimize damages resulting from the proposed action, the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, requires that the contractor take certain measures toward reducing environmental (wetland) damages. These measures are described in, but not limited to, the following sections:

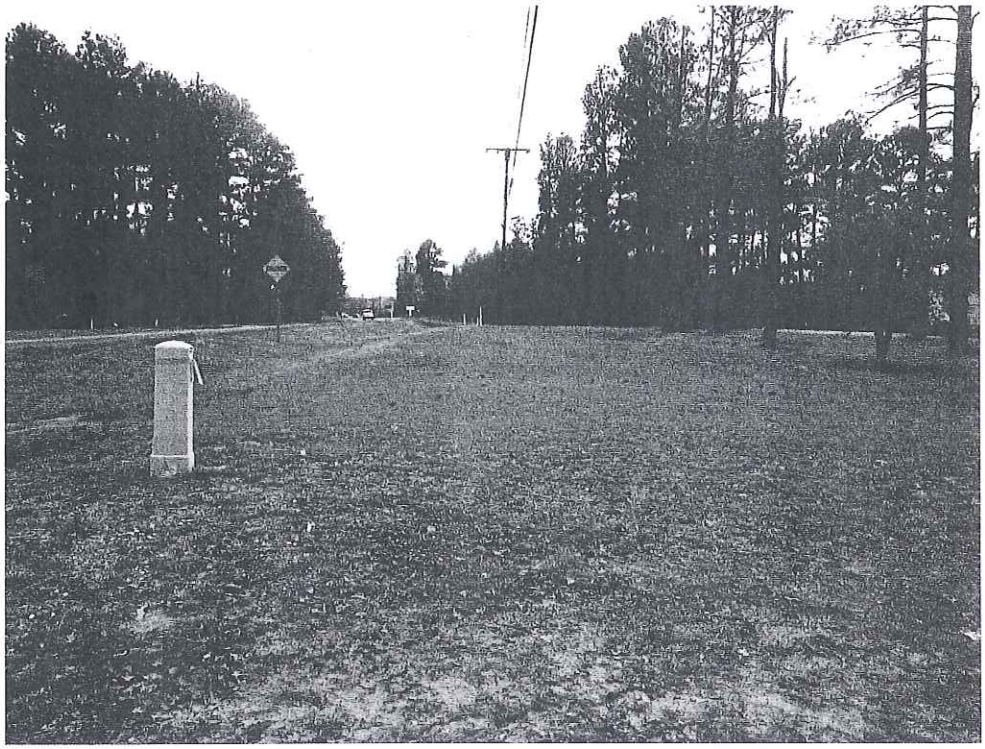
1. Scope of Work - Section 104
2. Control of Work - Section 105
3. Legal Relations and Responsibility to Public - Section 107
4. Clearing and Grubbing -Section 201
5. Removal or Relocation of Structures and Obstructions - Section 202
6. Excavation and Embankment - Section 203
7. Temporary Erosion Control - Section 204

It has been determined that there is no practicable alternative to the proposed construction involving wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from this project.

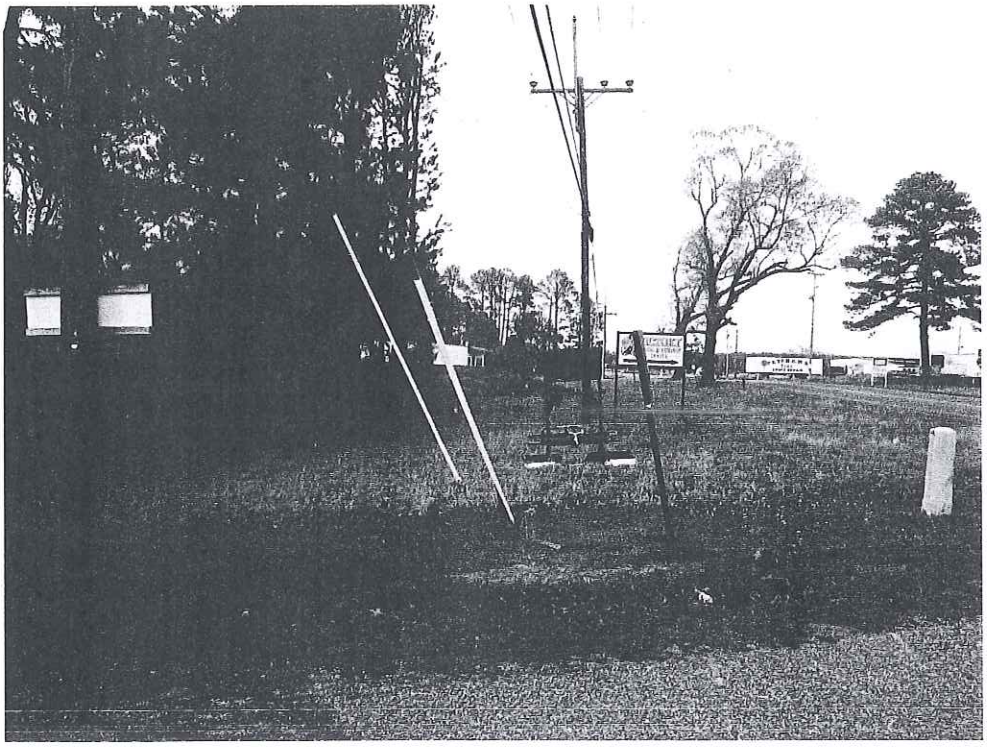
CET Cyndi Bowman
Environmental Impact Specialist
Environmental Section/LA DOTD
April 17, 2012

UPDATED: May 22, 2013
Cyndi Bowman

PHOTOGRAPHS of PROPOSED PROJECT H.001799

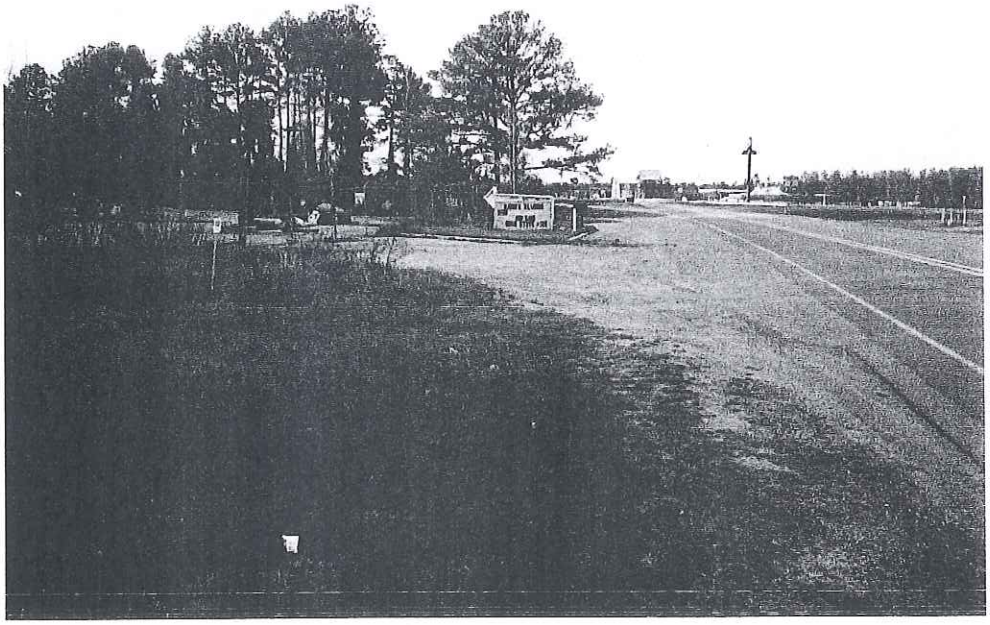


Existing and Required ROW along LA 531 (looking south)
South of I-20, West of LA 531

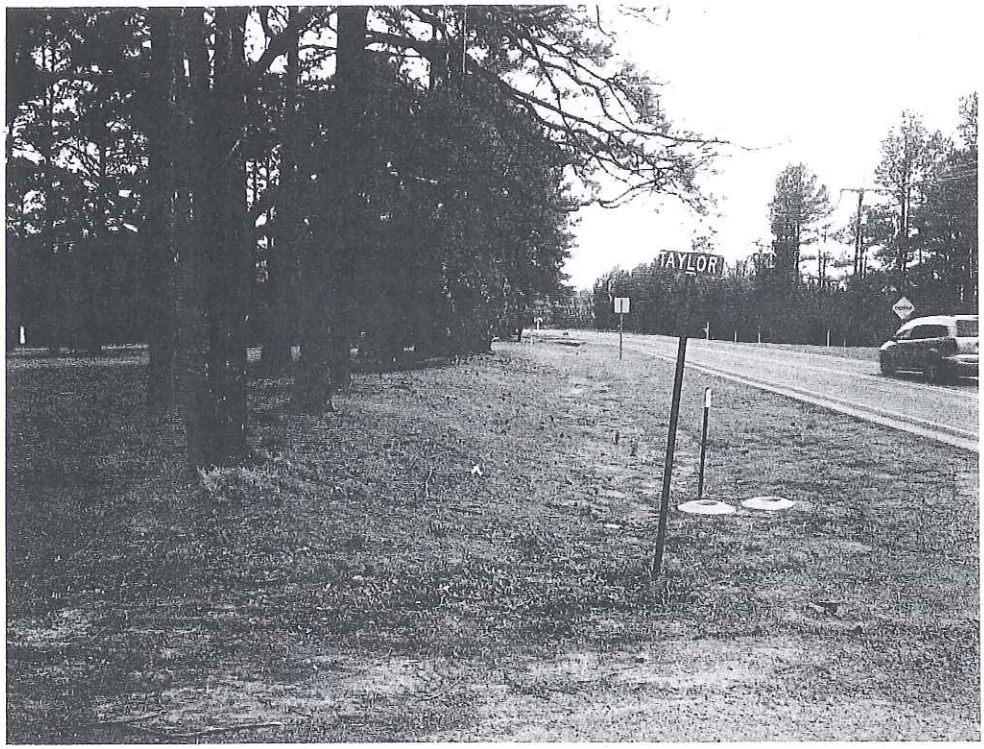


Existing and Required ROW along LA 531 (looking north)
South of I-20, West of LA 531

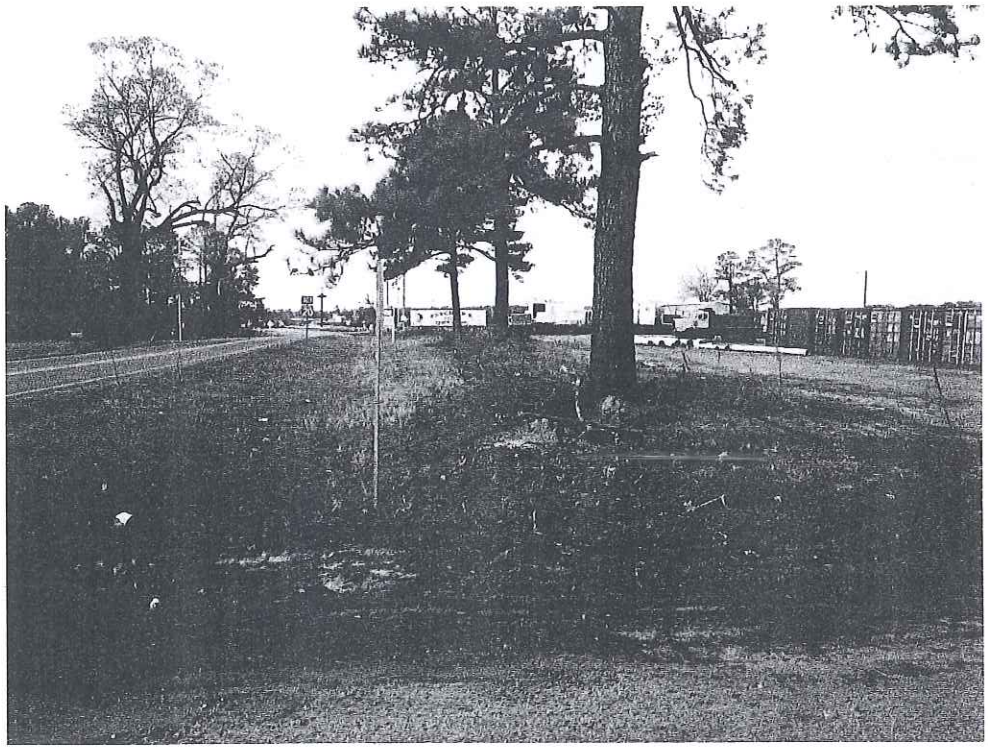
Existing and Required ROW along LA 531 (looking west)
South of I-20, West of LA 531



Existing and Required ROW along LA 531 (looking north)
South of I-20, West of LA 531



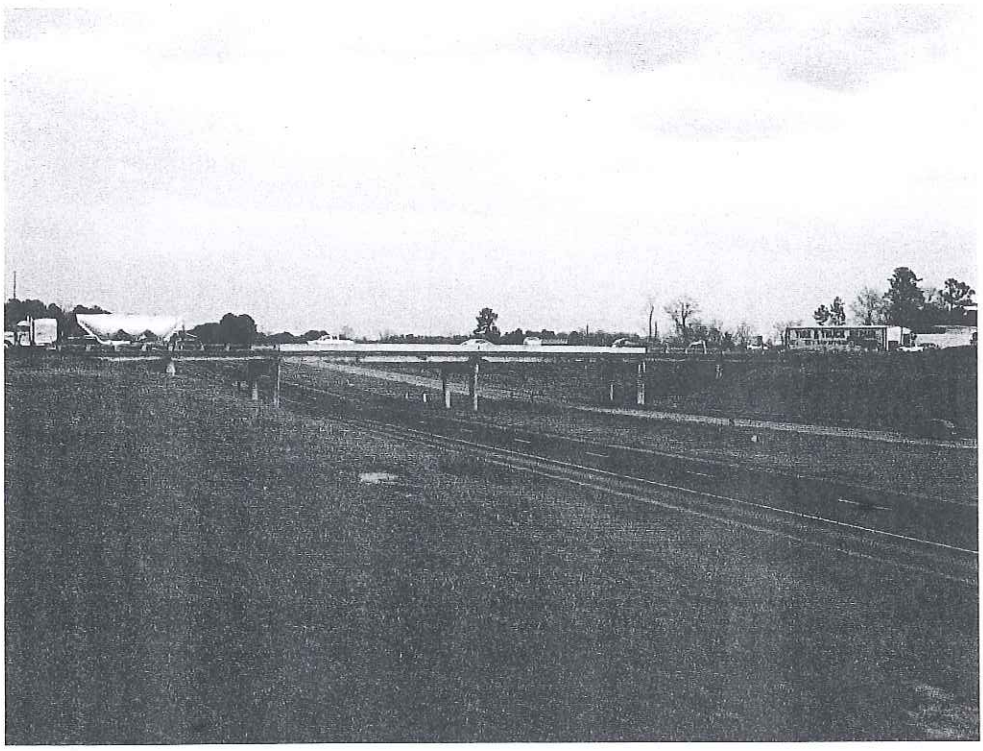
Existing and Required ROW along LA 531 (looking south)
South of I-20, East of LA 531



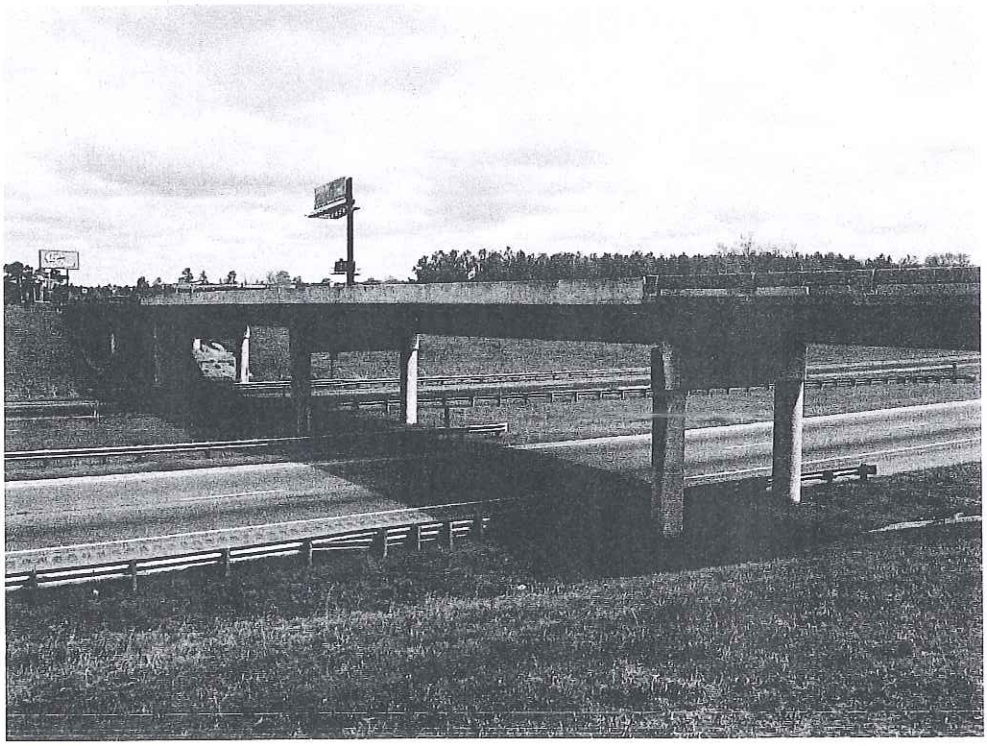
Existing and Required ROW along LA 531 (looking north)
South of I-20, East of LA 531

Existing and Required ROW along LA 531 (looking north)
South of I-20, East of LA 531

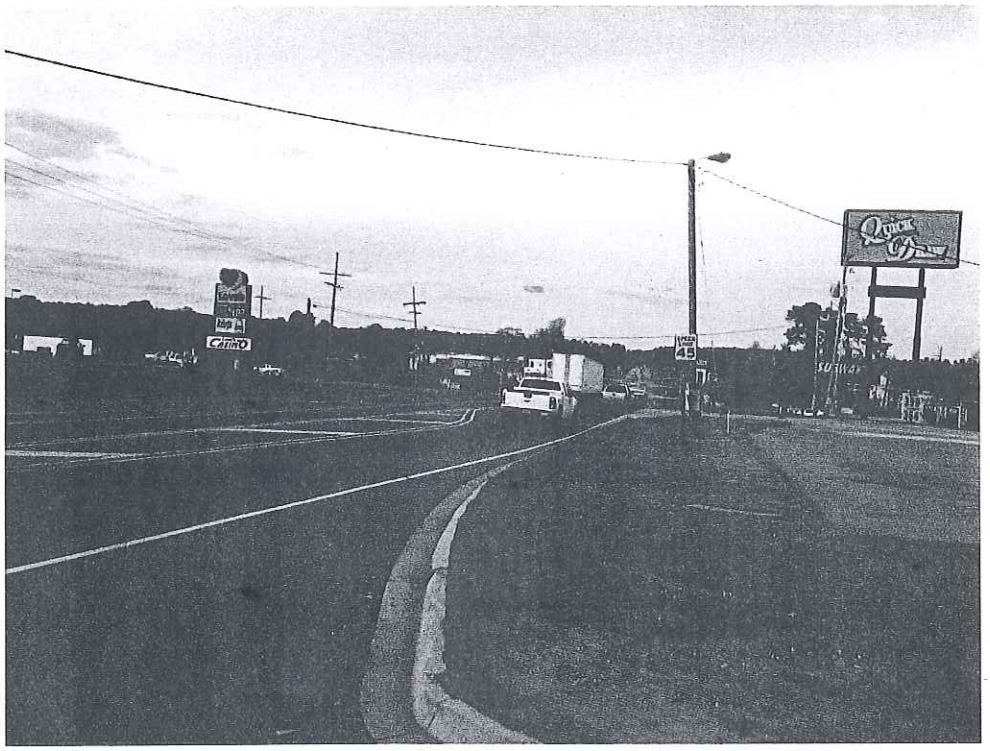
LA 531 Overpass (looking north)



LA 531 Overpass – (looking east)



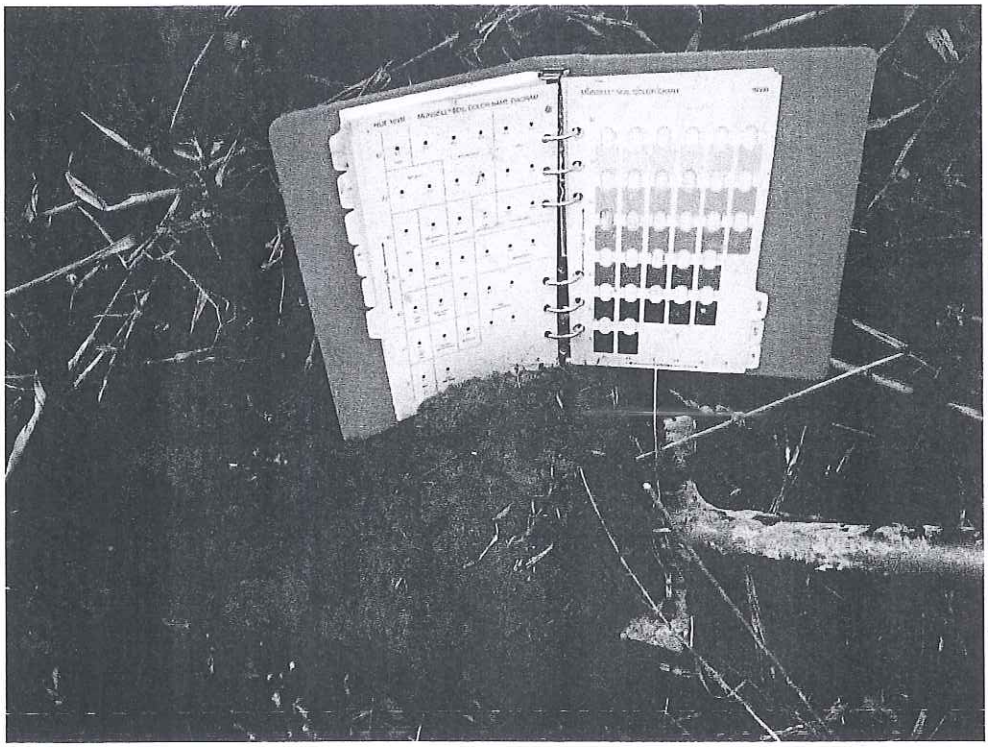
LA 531 Overpass – (looking east)



Existing and Required ROW along LA 531
North of I-20 (looking north)

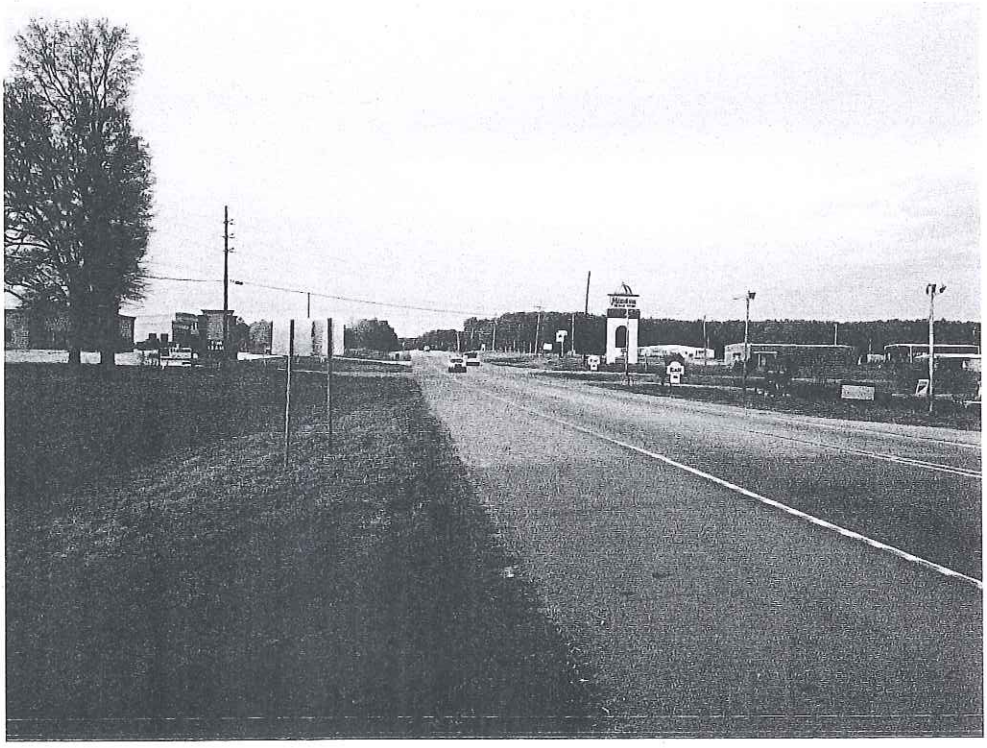
SITE 1 Wetlands & Other Waters
Existing and Required ROW along LA 531 (looking north)
North of I-20, East of LA 531

SITE 1 Wetlands & Other Waters
Existing and Required ROW along LA 531 (looking south)
North of I-20, West of LA 531

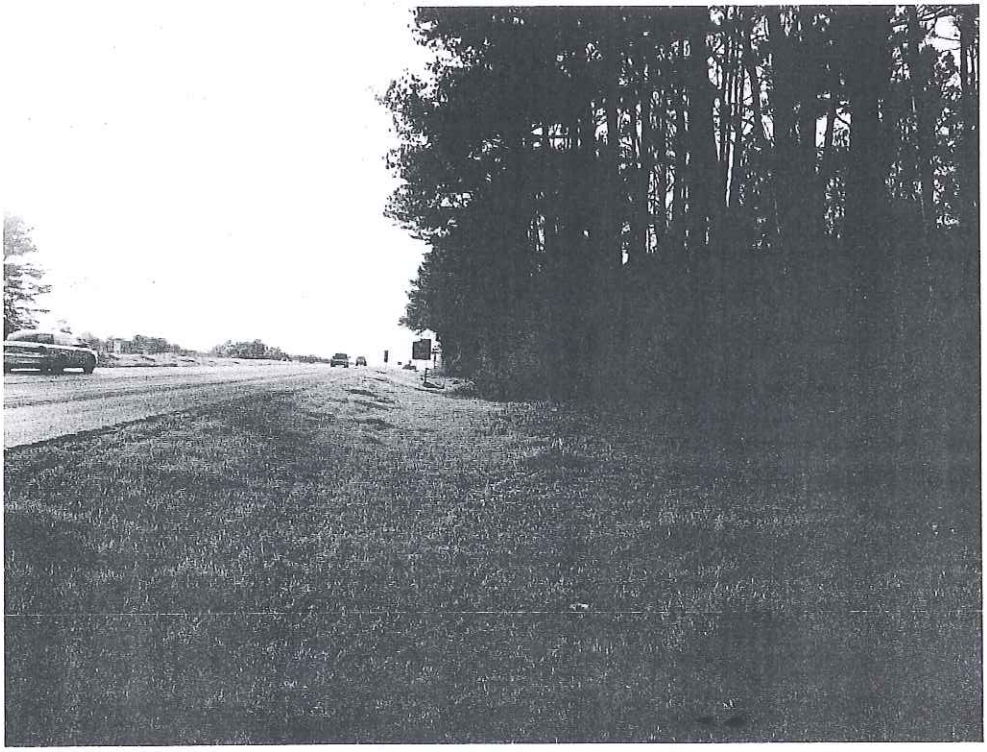


SITE 1 WL Soil

SITE 1 WL Vegetation



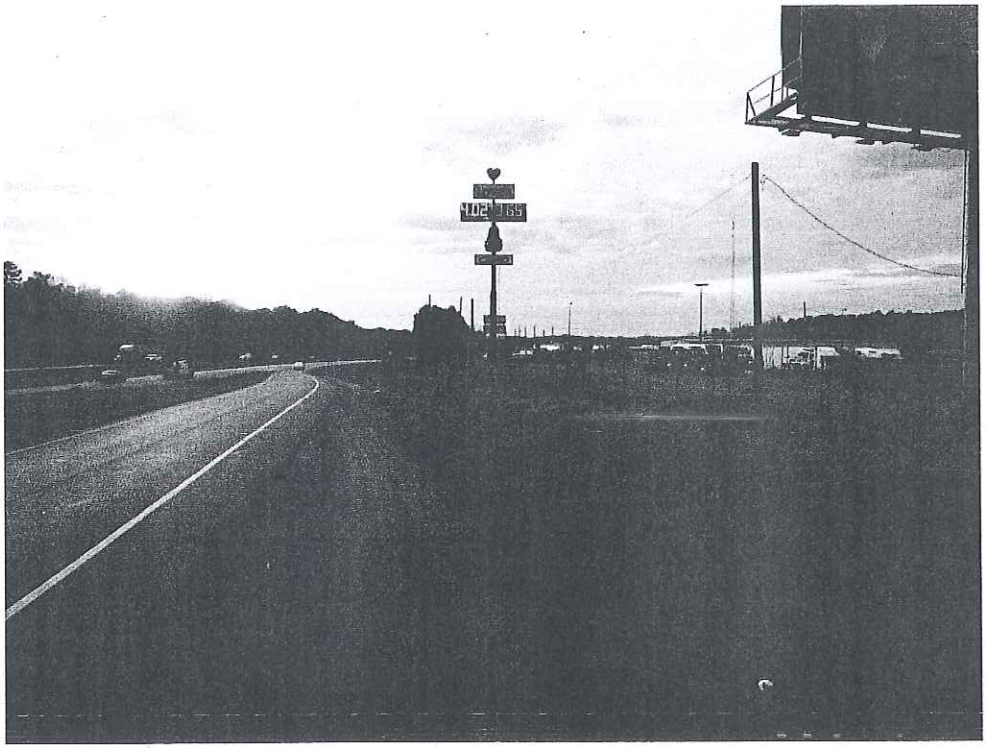
Existing and Required ROW along LA 531
North of I-20 (looking north)



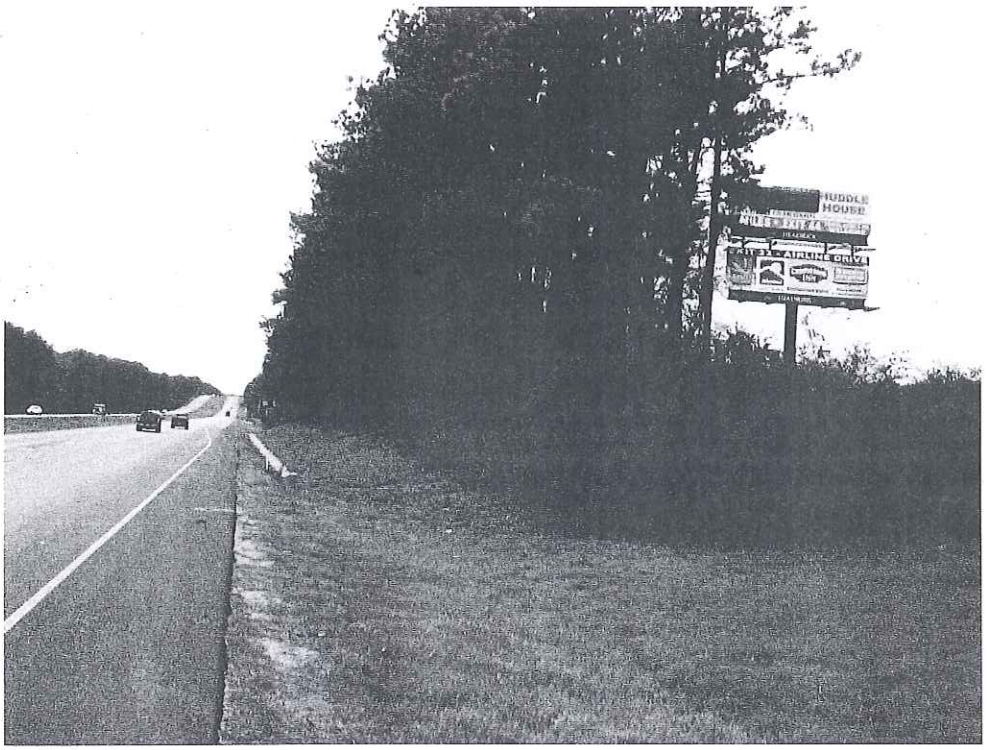
Existing ROW along I-20 (looking west)
East of 531 Overpass, North of I-20

Existing and Required ROW along I-20 (looking west)
East of 531 Overpass, South of I-20

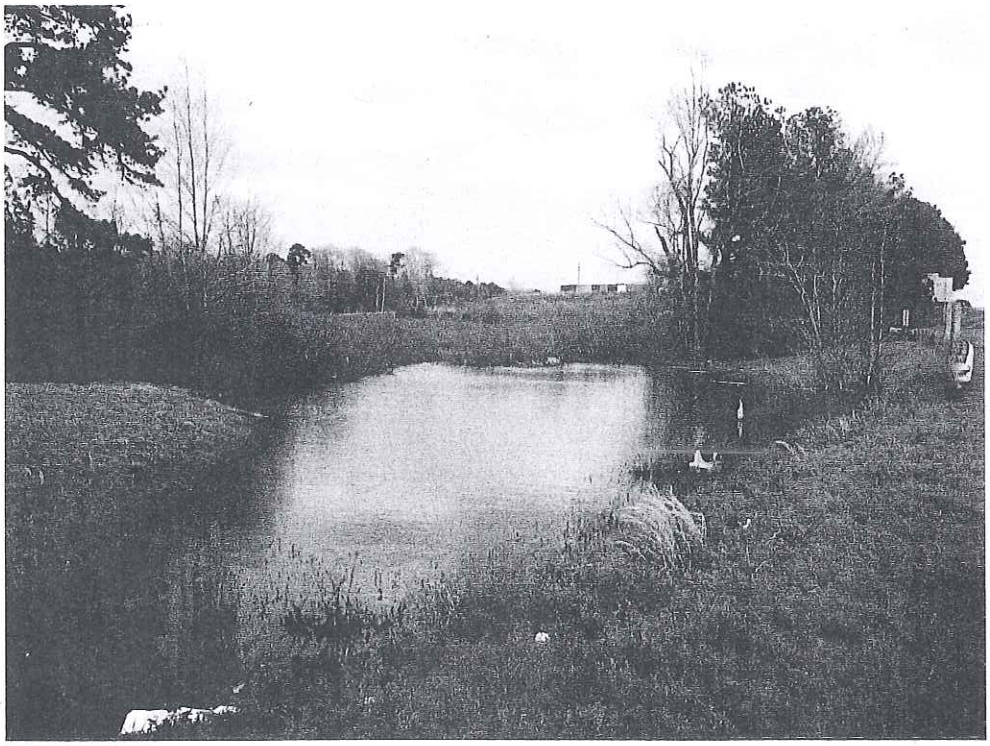
Existing ROW along I-20 (looking east)
East of 531 Overpass, South of I-20



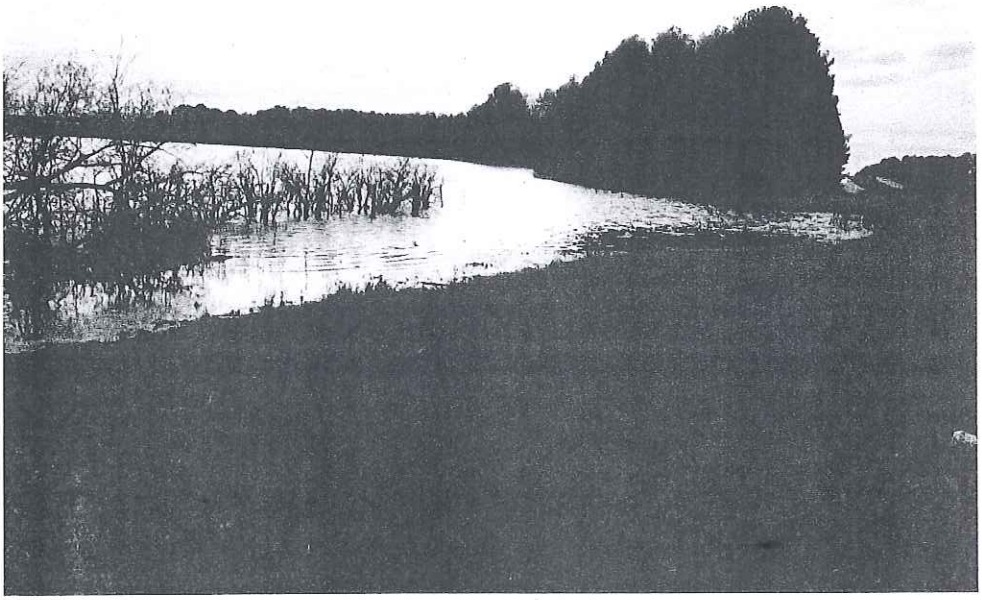
Existing and Required ROW along I-20 (looking west)
West of 531 Overpass, North of I-20



Existing and Required ROW along I-20 (looking west)
West of 531 Overpass, North of I-20



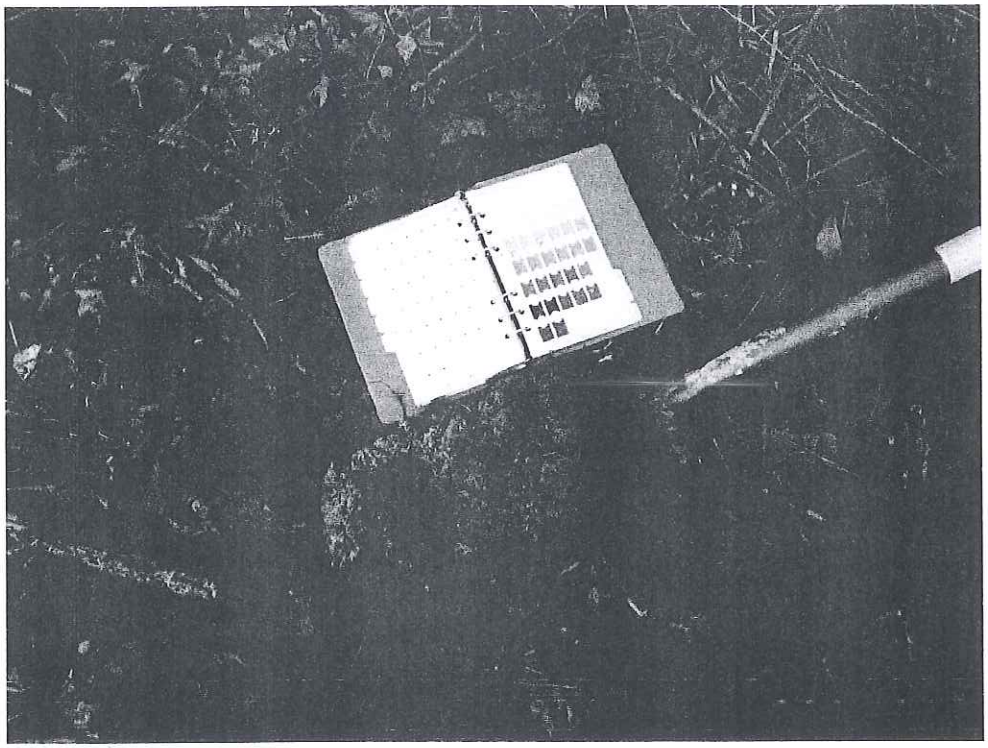
SITE 2 Wetlands & Other Waters
Existing ROW along I-20 (looking east)
West of 531 Overpass, North of I-20



SITE 2 Wetlands & Other Waters
Existing ROW along I-20 (looking west)
West of 531 Overpass, South of I-20

SITE 2 Wetlands & Other Waters
Existing ROW along I-20 (looking east)
West of 531 Overpass, South of I-20

SITE 2 Wetlands & Other Waters
Existing ROW along I-20 (looking west)
West of 531 Overpass, South of I-20



SITE 2 WL Soil

SITE 2 WL Vegetation

SITE 2 Wetlands
Existing ROW along I-20 (looking east)
West of 531 Overpass, South of I-20

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: H.001799 LA 531 OVERPASS AT I-20 City/County: WEBSTER Sampling Date: 3/6/2012

Applicant/Owner: LA DOTD State: LA Sampling Point: SITE 1

Investigator(s): CYNDI BOWMAN Section, Township, Range: Township T18N, Range R09W, Section 1

Landform (hillslope, terrace, etc.): CREEK FLOODPLAIN Local relief (concave, convex, none): CONCAVE Slope (%): _____

Subregion (LRR or MLRA): LRR P / MLRA 133B Lat: 32°35'0.9"N Long: 93°14'53.24"W Datum: NAD 83

Soil Map Unit Name: MN Mahan fine sandy loam, 5 to 12 % slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No _____	Depth (inches): _____	
Water Table Present?	Yes _____	No _____	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): < 6 inches	**Wetland Hydrology Present?** Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: SITE 1

Tree Stratum (Plot sizes: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix nigra (black willow)	60	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	60	= Total Cover	
Sapling Stratum ( )			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (30 ft radius)			
1. Baccharis halimifolia (Eastern baccharis)	50	yes	FAC
2. Pinus taeda (loblolly pine)	20	yes	FAC
3.			
4.			
5.			
6.			
7.			
	70	= Total Cover	
Herb Stratum (30 ft radius)			
1. Rubus betulifolius (blackberry)	50	yes	FAC
2. Andropogon glomeratus (bushy bluestem)	25	yes	FACW
3. Solidago gigantea (giant goldenrod)	25	yes	FACW
4. Gelsemium sempervirens(yellow jessamine	10	no	FAC
5. Smilax rotundifolia (Common greenbrier)	10	no	FAC
6. Wisteria frutescens (American wisteria)	5	no	FACW
7.			
8.			
9.			
10.			
11.			
12.			
	125	= Total Cover	
Woody Vine Stratum ( )			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: SITE 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 Y/R 4/6						SaClayLoam	
8-16	10 Y/R 4/2		10 Y/R 4/6	40	C	M	SaClay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12) (LRR T, U)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: H.001799 LA 531 OVERPASS AT I-20 City/County: WEBSTER Sampling Date: 3/6/2012

Applicant/Owner: LA DOTD State: LA Sampling Point: SITE 2

Investigator(s): CYNDI BOWMAN Section, Township, Range: Township T18N, Range R09W, Section 1,2

Landform (hillslope, terrace, etc.): CREEK FLOODPLAIN Local relief (concave, convex, none): CONCAVE Slope (%): _____

Subregion (LRR or MLRA): LRR P / MLRA 133B Lat: 32°34'54.27"N Long: 93°15'20.74"W Datum: NAD 83

Soil Map Unit Name: MN Mahan fine sandy loam & Ms Malbis fine sandy loam NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ✓ Water Marks (B1)
- ✓ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ✓ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No _____	Depth (inches): <8 inches
Water Table Present?	Yes ✓	No _____	Depth (inches): 10 inches
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0 inches

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: SITE 2

Tree Stratum (Plot sizes: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix nigra (black willow)	25	yes	OBL
2. Liquidambar styraciflua (sweet gum)	25	yes	FAC
3. Quercus nigra (water oak)	25	yes	FAC
4. Pinus taeda (loblolly pine)	15	no	FAC
5. Acer rubrum (red maple)	15	no	FAC
6.			
7.			
	105	= Total Cover	
Sapling Stratum ( )			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	
Shrub Stratum (30 ft radius)			
1. Sambucus canadensis (elderberry)	25	yes	FACW
2. Ilex vomitoria (yaupon holly)	20	yes	FAC
3.			
4.			
5.			
6.			
7.			
	45	= Total Cover	
Herb Stratum (30 ft radius)			
1. Juncus effusus (soft rush)	20	yes	FACW
2. Smilax laurifolia (laurel-leaf greenbriar)	10	yes	FACW
3. Smilax glauca (Cat greenbrier)	10	yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40	= Total Cover	
Woody Vine Stratum ( )			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No __

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: SITE 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10 Y/R 5/3						Sand	
5-8	10 Y/R 4/4						Sand	
8-16	10 Y/R 3/1		10 Y/R 4/6		C	M	SandyClay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) **(MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1) **(LRR O)**
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12) (LRR T, U)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

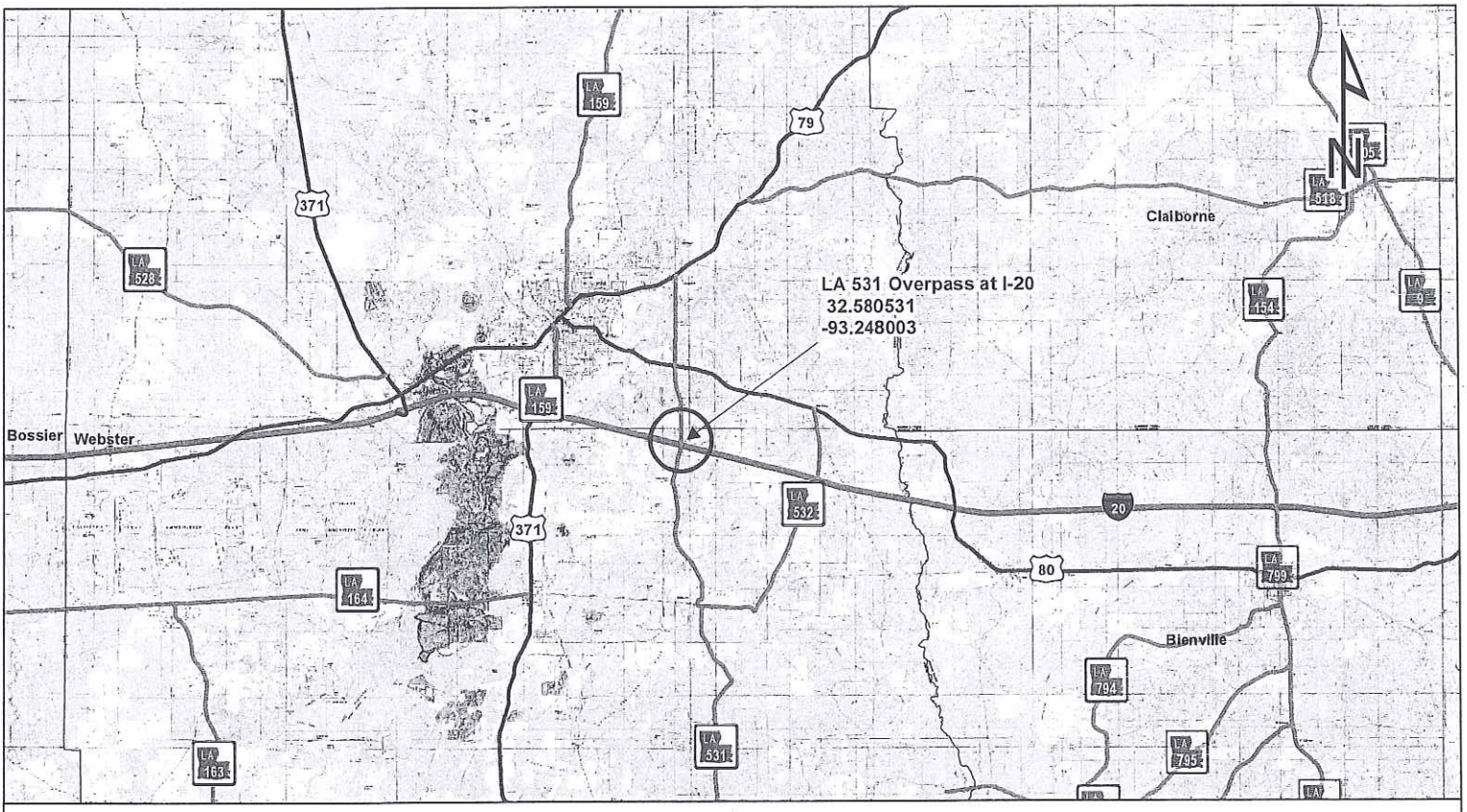
Restrictive Layer (if observed):

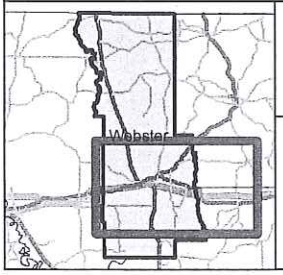
Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:





PROJECT LOCATION

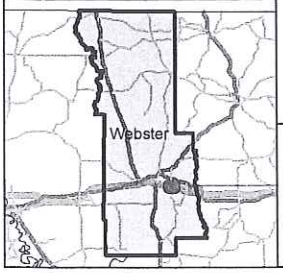
SOURCE: USGS 1:100,000 TOPOGRAPHIC MAP - SHREVEPORT NORTH QUADRANGLE

STATE PROJECT NO. H.001799
FEDERAL AID NO. H001799
LA 531 OVERPASS AT I-20
ROUTE LA 531
WEBSTER PARISH

LOUISIANA'S ON THE MOVE...
DOTD
BUILDS THE WAY

Project Limits 65.10 acres | **Wetlands** 1.98 acres | **Other Waters** 0.23 acres | ✳ **Soil Pit Site**

0.1 0.05 0 0.1 Miles

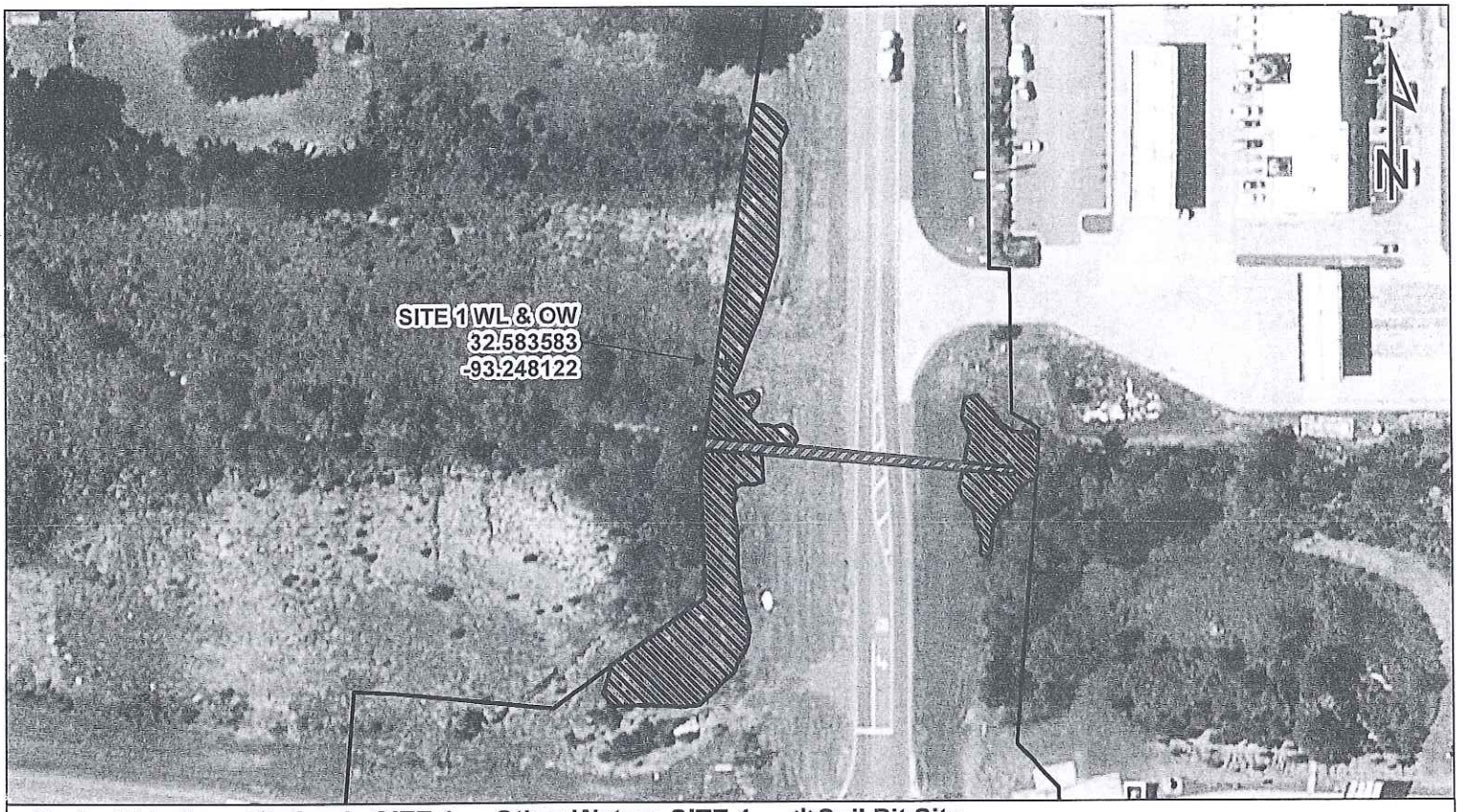


WETLAND AND OTHER WATERS IMPACTS

DIGITALGLOBE 30 CM IMAGERY

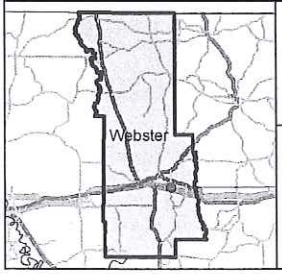
STATE PROJECT NO. H.001799
FEDERAL AID NO. H001799
LA 531 OVERPASS AT I-20
ROUTE LA 531
WEBSTER PARISH

LOUISIANA'S ON THE MOVE... DOTD BUILDS THE WAY



Project Limits 65.10 acres | **Wetlands SITE 1** 0.36 acres | **Other Waters SITE 1** 0.03 acres | ✱**Soil Pit Site**

0.02 0.01 0 0.02 Miles



WETLAND AND OTHER WATERS IMPACTS

DIGITALGLOBE 30 CM IMAGERY

STATE PROJECT NO. H.001799
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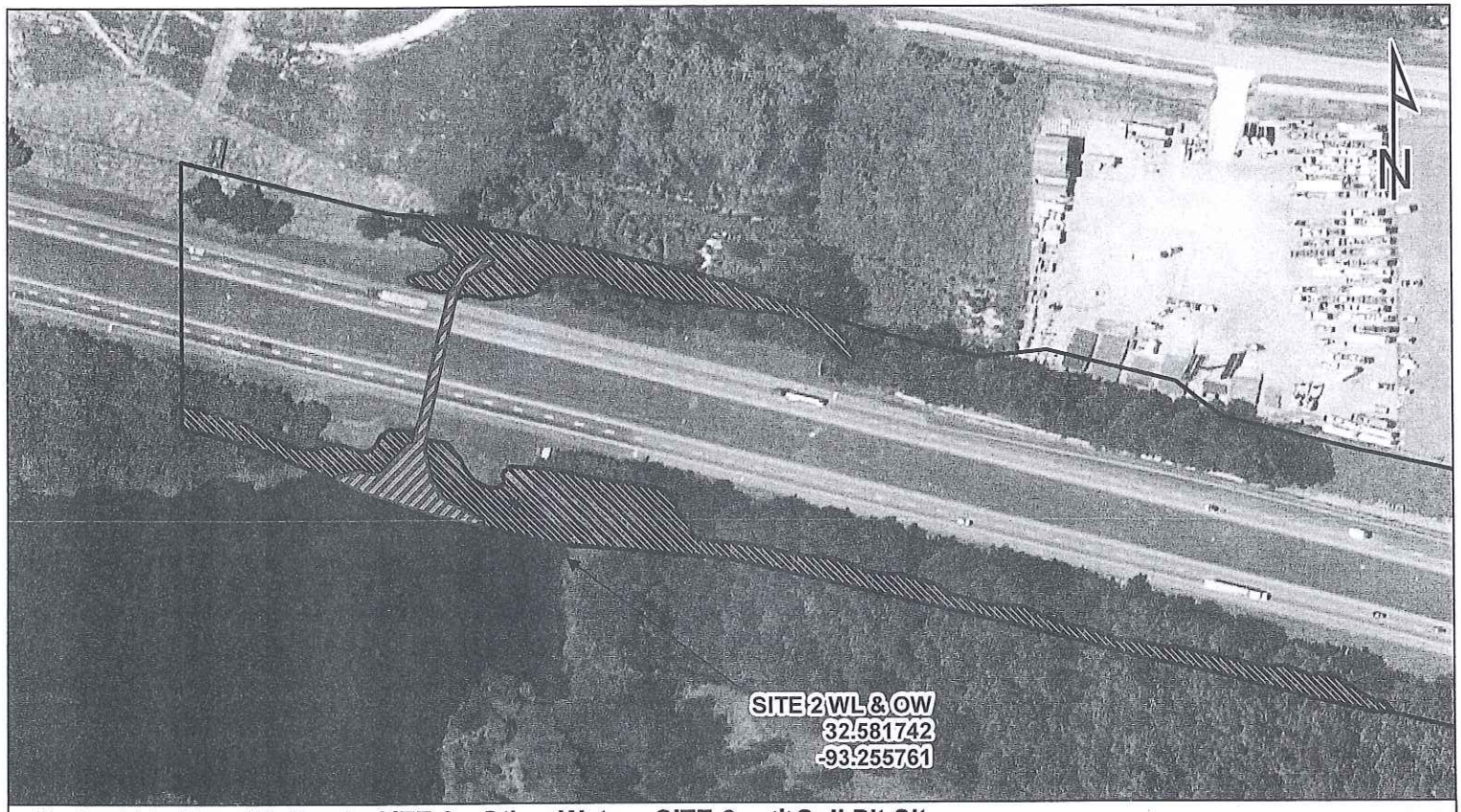
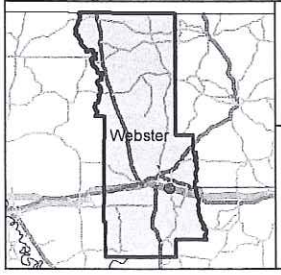
WEBSTER PARISH

LOUISIANA'S ON THE MOVE... DOTD BUILDS THE WAY



Project Limits 65.10 acres | **Wetlands SITE 2** 1.62 acres | **Other Waters SITE 2** 0.20 acres | ✱**Soil Pit Site**

0.035 0.0175 0 0.035 Miles



WETLAND AND OTHER WATERS IMPACTS

DIGITALGLOBE 30 CM IMAGERY

STATE PROJECT NO. H.001799
FEDERAL AID NO. H001799
LA 531 OVERPASS AT I-20
ROUTE LA 531
WEBSTER PARISH

LOUISIANA'S ON THE MOVE...
DOTD
BUILDS THE WAY

APPENDIX C

Phase 1 Environmental Site Assessment (without appendices)

US DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

AND

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

FOR

STATE PROJECT No. H.001799 (452-03-0047)

FEDERAL AID PROJECT No. H.001799; BHI-20-1(213)

LA 531 OVERPASS

I-20

WEBSTER PARISH

TABLE OF CONTENTS

APPENDIXES

1.0 SUMMARY

Phase 1 Environmental Site Assessment (ESA) was conducted for the Louisiana Department of Transportation and Development. The Purpose of the assessment was to disclose factual environmental information and render opinion regarding the environmental data collected and information reviewed.

The Department of Transportation and Development is proposing to replace existing LA 531 overpass at interstate 20 in Webster Parish, Louisiana. The project site is located at Latitude 32 34' 49.8" and Longitude -93 14' 52" or approximately three miles east of Minden, Louisiana. The structure was built in 1960 and is approximately 302 feet long and 24 feet wide. It has two 11' wide thru travel lanes with no shoulders. It has a weight restriction in place and minimal vertical clearance over interstate 20. The current Average Daily Traffic (ADT) on LA 531 is about 18,000 vehicles per day and is anticipated to increase to about 30,000 vehicles per day for the design year of 2035. Truck traffic is approximately 11.9%.

Alternate 1 proposes replacing the existing two lane overpass with a widened overpass structure. The widened overpass structure will accommodate one northbound lane, one southbound lane, and a left turn lane onto the eastbound I-20 ramp. Two frontage roads will also be installed south of the I-20 and LA 531 interchange to allow safe access to the businesses near the interchange. North of the overpass, LA 531 will be widened to four lanes, and after industrial Drive, LA 531 interchanges would remain as through lanes and a center two-way left turn lane. The I-20 and 531 interchanges would remain as stopped controlled and the LA 531 and Industrial Drive intersection would remain as signal controlled.

Alternate 1A – LA 531 and Industrial Drive Roundabout

Alternate 1A proposes the same improvements as Alternate 1 with the exception of installing a roundabout at the intersection of LA 531 and Industrial Drive instead of a signal controlled intersection.

Alternate 2 – LA 531 Roundabouts

Alternate 2 proposes replacing the existing two lane overpass with a new overpass and installing single-lane roundabouts at the following intersections: LA 531 and I-20 eastbound ramp, LA 531 and the I-20 westbound ramp.

Alternate 3 – No Build

Alternate 3 – No work will done to the current bridge or the project corridor.

During construction, through and local traffic will be maintained on LA 531 at all times, and the ramps will remain functional. Access to businesses and residences will also be maintained. It is not anticipated that traffic on I-20 will be impacted.

Logical termini for this project have been established between US 80 and LA 532 along LA 531. This project will be processed as an Environmental Assessment (EA); if a corps of Engineer Permit is required, the Nationwide Permit found at 330.5 (a) is anticipated to be used.

2.0 INTRODUCTION

2.1 PURPOSE

The purpose of a phase 1 Environmental Site Assessment is to identify, to the extent feasible, pursuant to the processes prescribed herein, *recognized environmental conditions* in connection with the subject project in accordance with American Society of Testing and Materials (ASTM) Standard Practice E-1527-05. The term *"recognized environmental conditions"* means the presence or likely presence of any hazardous substances or petroleum products in the project area under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or in the soil, groundwater, or surface water of the subject property. A phase 1 Environmental Site Assessment is intended to reflect a commercially prudent and reasonable inquiry in order to satisfy one of the requirements to qualify for the *innocent landowner defense* under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

2.2 SPECIAL TERMS AND CONDITIONS

The findings and conclusions of this report are not scientific facts, but rather, probabilities based on professional judgment concerning the significant data gathered during the course of the assessment. The author is not able to verify that the properties within the assessment area or adjoining land contain no hazardous substances, petroleum products, or other latent conditions beyond those detected or observed during the assessment period. There are always possibilities for contaminants to migrate through surface water, air, soil, or groundwater. The ability to accurately ascertain and address the environmental risks associated with reference to the subject properties within the assessment area, only pertain to the conditions that existed at the site within the assessment area during the time in which the site inspections were conducted.

2.3 LIMITATIONS AND EXCEPTIONS OF THE ASSESSMENT

This report and other instruments of service were prepared for, and made available for the sole use of Louisiana Department of Transportation and Development. The contents thereof may not be used or relied upon by other persons or entity without written consent and authorization of LADOTD.

2.4 LIMITING CONDITIONS AND METHODOLOGY USED

A ground-level property inspection was conducted and observations relating to the condition of the environment at the subject properties within the assessment area were recorded. The report was prepared to summarize the findings and observations related to the condition of the subject properties within the assessment area. This report contains description of the properties within the assessment area. Also included are reviewable records, searched for any *recognized environmental conditions within the assessment corridor.*

3.0 SITE DESCRIPTION

3.1 LOCATION AND LEGAL DESCRIPTION

Properties within the assessment area are located along LA 531 from junction of US 80 to LA 532 in Webster Parish, Louisiana. The assessment corridor is located within Township T18N, Range R09W, Sections 1 and 2. Maps showing the location of the assessment area are included in the figures.

3.2 SITE SOILMAP CHARACTERISTICS

The project corridor consists mainly of two map units (MN-Mahan fine sandy loam, 5 to 12 percent slopes and Mh-Mahan fine sandy loam, 1 to 5 percent slopes).

MN-MAHAN FINE SANDY LOAM, 1 to 5 PERCENT SLOPES

Mahan fine sandy loam, 1 to 5 percent slopes covers most of the project site from southern portion of the project. The soil is gently sloping and well drained. It is on ridge tops on uplands. The areas of this soil are irregular in shape and range from 20 to 250 acres. Typically, the surface layer is dark brown fine sandy loam about 7 inches thick. The subsurface layer is yellowish red fine sandy loam about 4 inches thick. The subsoil to a depth of about 75 inches is red clay loam in the upper part; red, mottled sandy clay in the middle part; and red, mottled sandy loam in the lower part. Pebbles and fragments of ironstone exist throughout the profile.

This Mahan soil has medium fertility. Water and air move through this soil at a moderate rate. Water runs off the surface at a medium rate. This soil dries quickly after rains. The shrink-swell potential is low. Included with this soil in mapping are a few areas of Darley, Ruple, and Sacul soils. Darley and Ruple soils typically are at a slightly higher elevation yhan the Mahan soil and have more ironstone fragments in the surface, subsurface, and subsoil layers. Sacul soils have grayish mottles in the upper part of the subsoil and are at a lower elevation than the Mahan soils.

MN-MAHAN FINE SANDY LOAM, 5 TO 12 PERCENT SLOPES

This soil covers the upper section of the project. This soil is strongly sloping and well drained. It is on the side slopes on uplands. The areas of this soil are irregular in slope and ranges from 40 to 300 acres. Fewer observations were made than in other map units because of slope and less intensive usu of the soil. Typically, the surface layer is yellowish brown, fine sandy to a depth of about 8 inches thick. The subsurface layer is yellowish red fine sandy loam about 6 inches thick. The subsoil to a depth of about 75 inches is yellowish red sandy loam in the upper part, red sandy clay in the middle part, and red sandy loam in the lower part. This soil has middle fertility. Water and air move through this soil at a moderate rate. Water runs off the surface at a rapid rate. The shrink-swell potential is low.

3.3 DESCRIPTIONS OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS ALONG PROJECT CORRIDOR

LA 531 is comprised of two traffic lanes running in opposite directions. The road surface is of asphaltic concrete. The corridor is semirural and sparsely populated. Both sides of the road are

sparsely lined with pine and hard wood stands. There are less of industrial developments along the corridor. The road is heavily travelled with heavy trucks as much of the traffic mix.

3.4 INFORMATION REPORTED BY USER, REGARDING INVIRONMENTAL LIENS OR SPECIALIZED KNOWLEDGE OR EXPERIENCE.

The people interviewed at the project site had no knowledge of any Environmental liens or any specialized experience or knowledge. They did not know anything that might relate to environmental concern within the project corridor.

3.5 CURRENT AND PAST USES OF THE PROPERTIES

The properties within the assessment area have combination of uses including agriculture, residential, and commercial activities along the road.

4.0 RECORDS REVIEW

STANDARD ENVIRONMENTAL RECORD SOURCES, FEDERAL AND STATE

Site visit and record research of LADEQ database showed gas stations north of junction of LA 531 and

US HWY 20. Three of them (Love, quick draw, and shell Gas stations) are open and operating and one of them (Menden Truck Center LLC – Oasis Truck Stop & Casino) is closed. Records from DEQ data base showed that the gas station is properly closed, and monitored for contaminations. Pictures of the closed and operating gas stations are enclosed in the appendix.

4.41 FEDERAL DATABASES

A. NATIONAL PRIORIY LIST (NPL)

The NPL Report, also known as Superfund List, is an USEPA listing of uncontrolled or abandoned hazardous waste sites. The list is primarily based upon a score that the site receives from the EPA's Hazardous Ranking System. These sites are targeted for possible long-term remedial action under the superfund Act of 1980. NPL sites were not identified within one mile radius of the assessment area.

B. RESOURCE CONSERVATION AND RECOVERY ACT CORRECTION ACTION (CORRACTS)

The CORRACTS database is a listing of RCRA facilities that are undergoing "corrective action".

A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constitute actions that may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA. CORRACTS sites were not identified within one mile radius of the assessment area.

C. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT INFORMATION SYSTEM (CERCLIS)

The CERCLIS Database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste sites. These sites have either been investigated or are currently under investigation by EPA for the release or potential release of hazardous substances. Once a site enters CERCLIS, it may be subject to several levels of review and ultimately placed on the National Priority List (NPL). No CERCLIS NFRAP sites were found within half a mile of the assessment area.

D. RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM, TREATMENT, STORAGE, AND RECOVERY FACILITIES (RCRIS TSD)

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities that report generation, storage, transportation, treatment or disposal of hazardous waste. No RCRIS TSD sites were identified within half a mile of the assessment area.

E. RESOURCES CONSERVATION AND RECOVERY INFORMATION SYSTEM (RCRIS) – GENERATORS LIST

The EPA RCRIS database serves to track the status of registration, permits, reports, inspections, enforcement activities and financial data of large (LG GEN) and small quantity generators (SM GEN) regulated under the Resource Conservation and Recovery Act (RCRA). No RCRA generators of hazardous waste were identified within a half mile of the assessment area.

F. EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS)

The ERNS is a national computer database and retrieval system used to store information on release of oil and hazardous substances. It consists of release notifications submitted to the National Response Center of the United States Coast Guard since 1987. The system contains preliminary information on specific releases, including the reported discharges, date of release, material released, cause of release, incident location, response actions taken, authorities notified, and affected environmental medium. ERNS database did not show anything within this project corridor.

4.2 STATE DATABASES

A. STATE SUPERFUND

The Louisiana DEQ maintains a state equivalent of CERCLIS database, in its Interactive and Abandoned Sites Division, a comprehensive list of known or suspected uncontrolled or abandoned hazardous sites in the state of Louisiana. The database search did not indicate that the site has any history of leakage from tanks or piping. No state superfund sites were found within half mile radius of the assessment area.

B. HAZARDOUS WASTE SITES (HWS)

The Louisiana DEQ maintains a database in its Hazardous waste division of permitted hazardous waste sites in the state. No HWS was identified within the project corridor.

C. SOLID WASTE FACILITIES (SWF)

The Louisiana solid waste facility report is a listing of all permitted solid waste landfills operating in the State. No SWF site was identified within one mile radius of the assessment area.

D. Registered UNDERGROUND STORAGE TANKS (ASTs) AND ABOVE GROUND STORAGE TANKS (ASTs)

The Louisiana DEQ underground storage tank division maintains a database for USTs and ASTs in Louisiana. The database includes information such as tank identification number, owner, installation date, age, closure date, status, contents, capacity, and location. LDEQ data base search for UST and AST showed one gas station within the project corridor (Minden Truck Center LLC). This facility is closed and the records show that it is properly closed and site is being monitored by Jones Environmental. Records obtained from LADEQ data base are enclosed in the appendix.

5.0 INFORMATION FROM SITE RECONNISSANCE AND INTERVIEWS

Personnel from DOTD visited the project corridor on May 11, 2012 and April 16, 2013 and did not observe any kind of environmental concern within the project corridor. There was no indication of any solid waste dumping within the project site and no apparent concerns of migrating hazardous substances. There are three other gas stations (SHELL, LOVE, and QUICK STOP) within the project corridor that did not show up during record search of LDEQ data base. Workers at the gas stations were interviewed and they have no knowledge of any leak or incident about the facilities. The gas stations environments are very clean and have no sign of any environmental concern. Section 12.1.4.1 of the ASTM E 1527-99 Standard for Phase 1 ESAs lists Asbestos as a non-scope consideration. However, some building structures on the project corridor are old and might contain possible Asbestos –Containing Materials (ACM). Also Section 12.1.4.3 of the ASTM 1527-00 Standard for Phase 1 ESAs lists lead paint as a non-scope consideration. However, some buildings within the project corridor are old and may contain possible lead-based paint.

6.0 FINDINGS AND CONCLUSIONS

DOTD Environmental Section performed this Phase 1 Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E-1527-00 on the above referenced project. LDEQ data base search for UST showed one gas station within the project corridor Minden Truck Center LLC). This facility is closed and records show that it is properly closed and the site is being monitored by Jones Environmental. Records obtained from LADEQ database are enclosed in the appendix. The assessment did not identify any leaking underground/aboveground tank or oil spills. The assessment in general revealed no evidence of recognized environmental conditions.

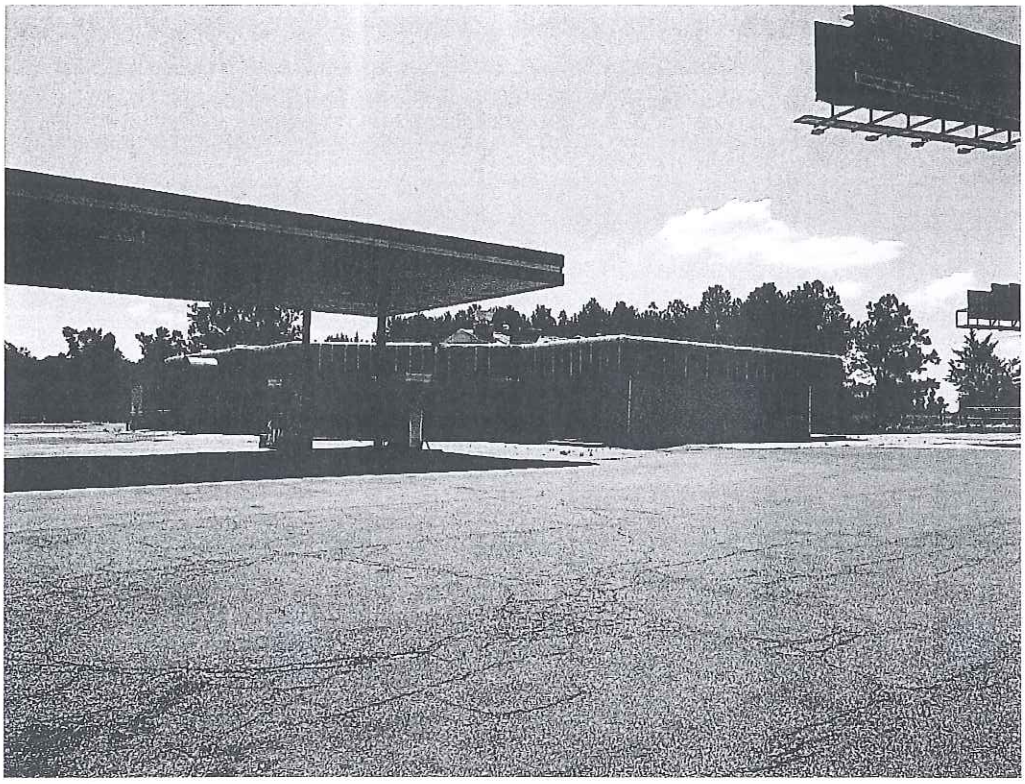
7.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

_____

Ezekiel Onyegbunam (LADOTD, Environmental Section)

8.0 QULIFICATION(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Ezekiel Onyegbunam has B.S. in Civil Engineering and MS in Environmental Sciences. He has good experience in environmental evaluation of projects, and review of environmental documents submitted by consultants. He has been working for LA DOTD for more than eighteen years mostly dealing with NEPA process –CE & EA preparations, wetland delineation, noise study, phase 1 Environmental Site Assessment and other matters relating to NEPA process.

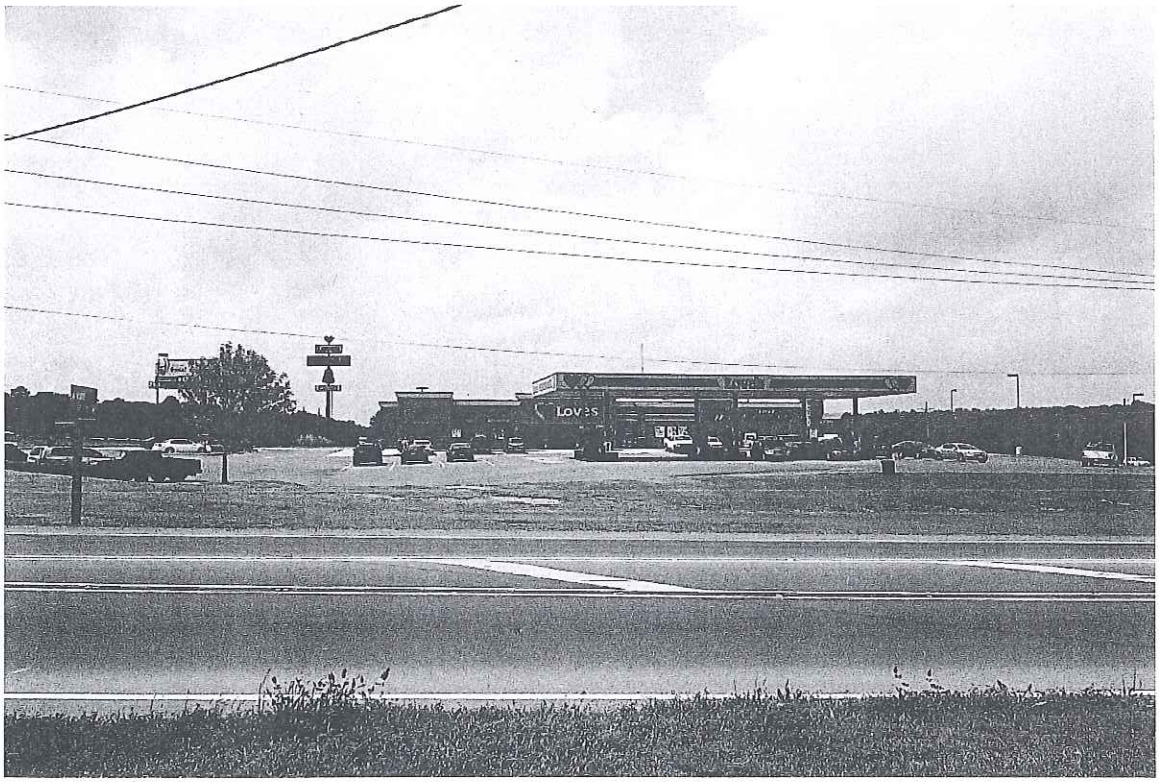


A view of Minden Truck Center LLC-Oasis Truck Stop & Casino (Closed)

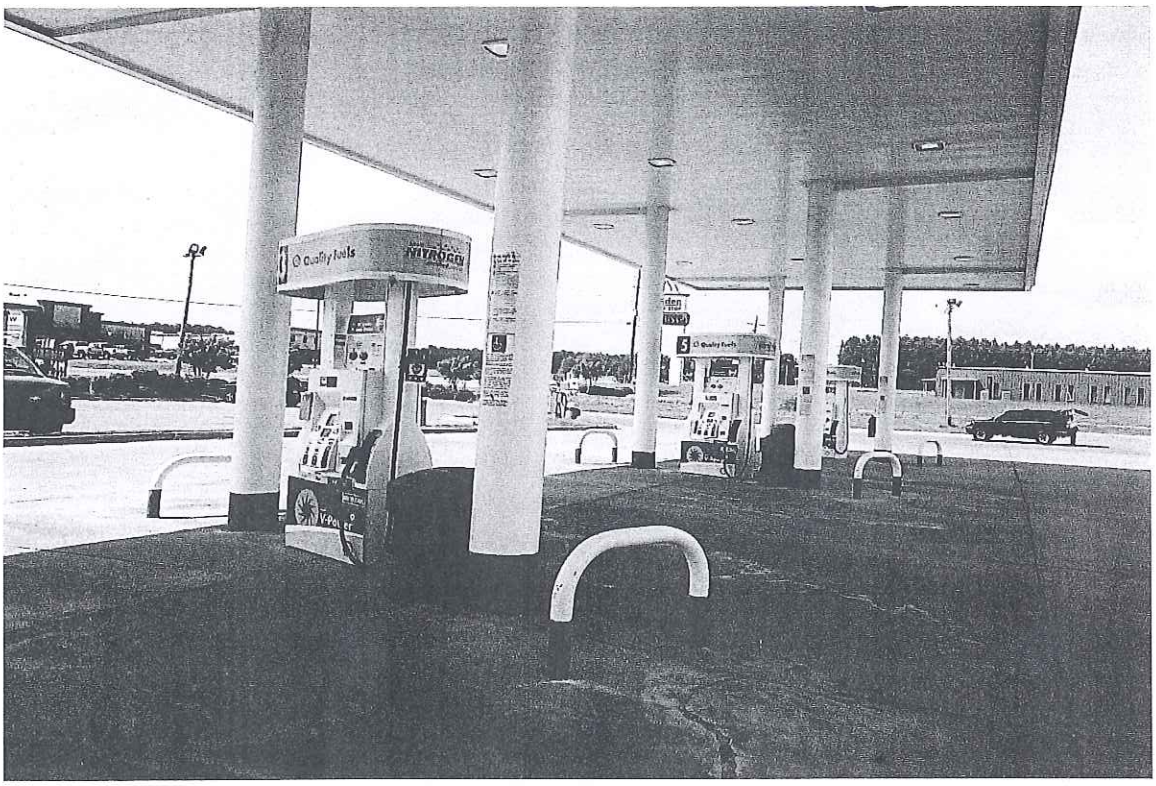
Another view of the closed Minden Truck Center LLC-Oasis Truck Stop & Casino

Quick Draw gas station at LA 531/

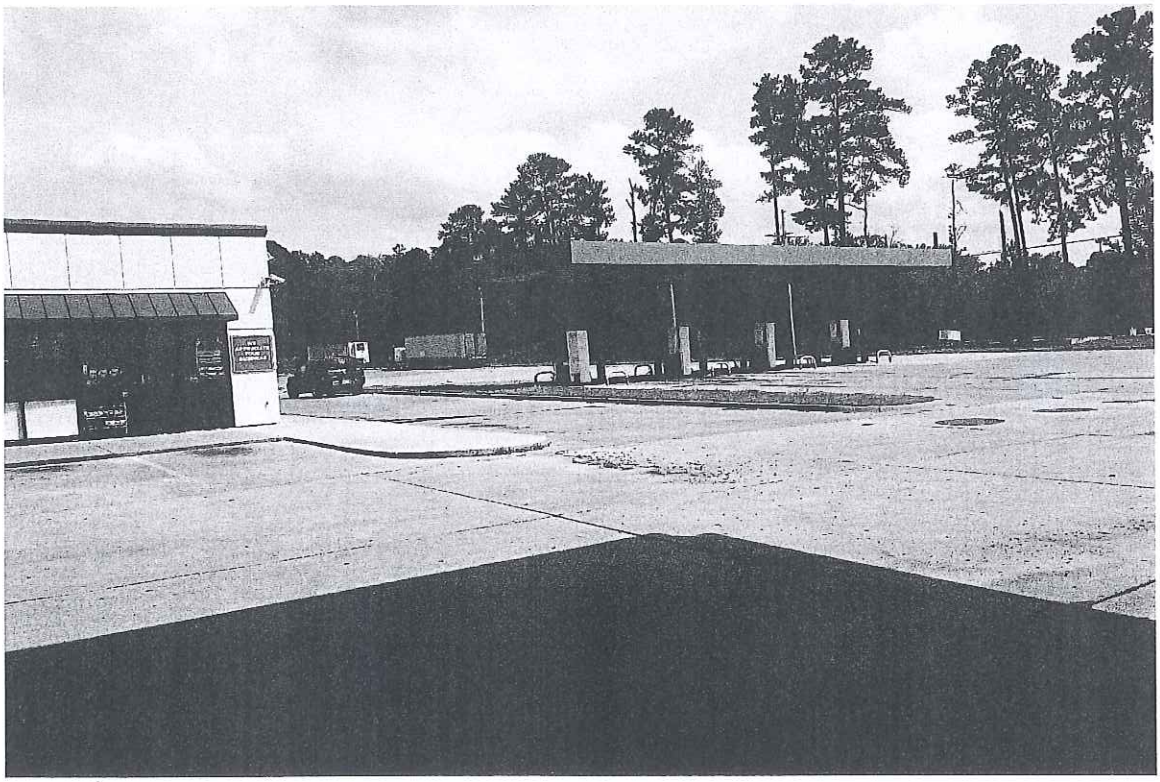
Another view of the same Qick Draw gas station



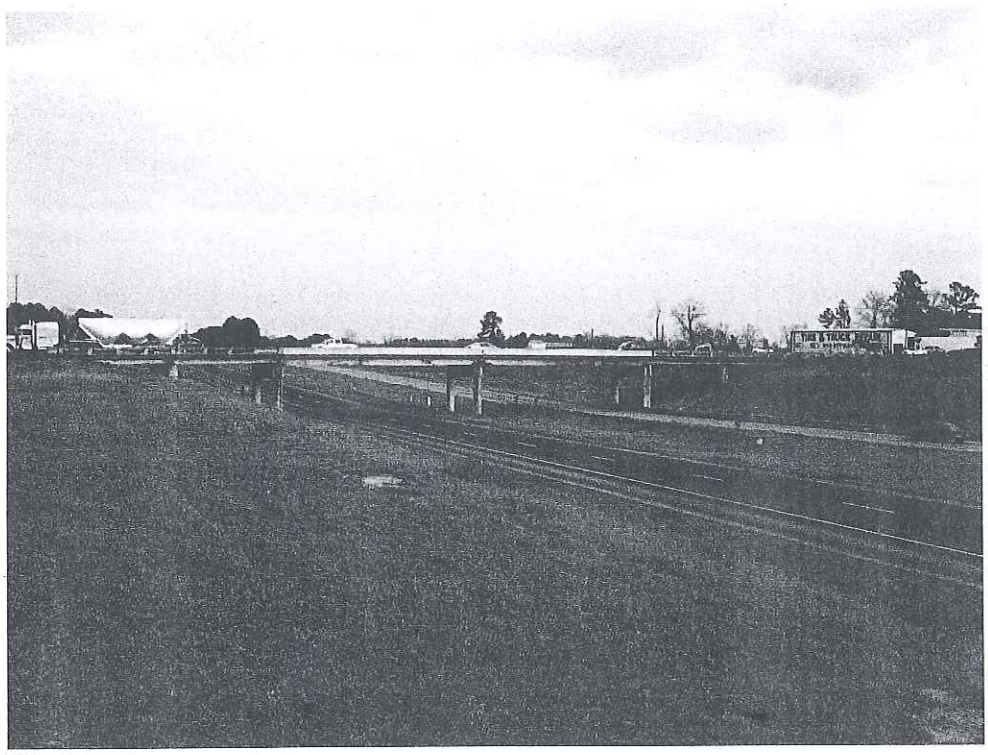
LOVES CASINO & GAS STATION OPPOSITE MINDEN THE CLOSED TRUCK CENTER LLC ON LA 531



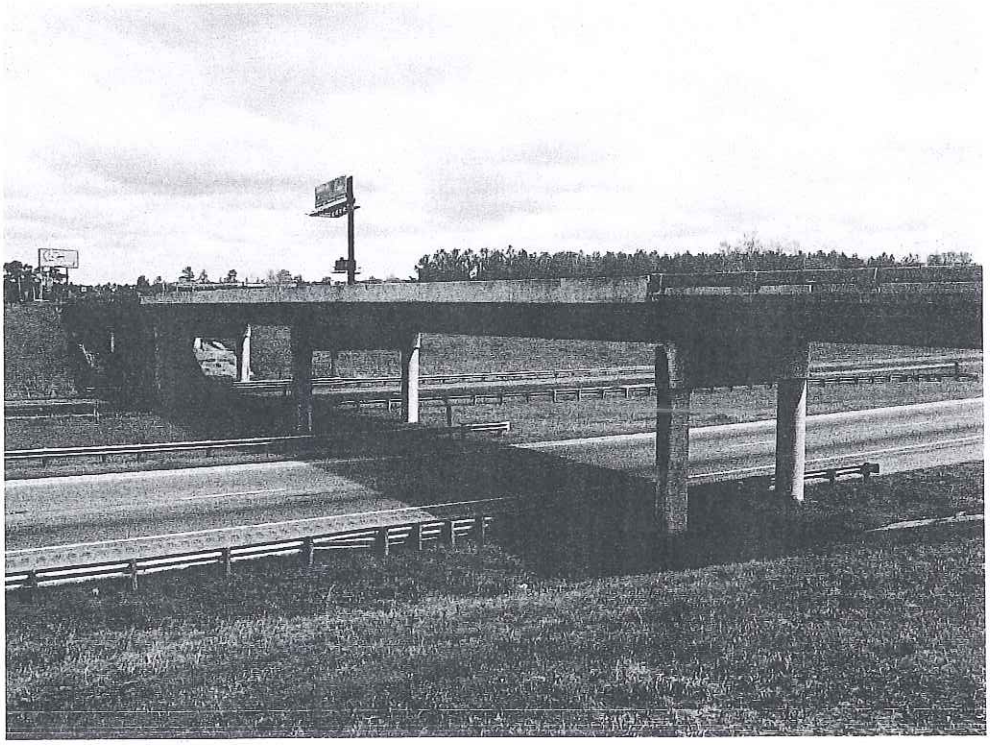
SHELL GAS STATION at 1629 Hwy 531



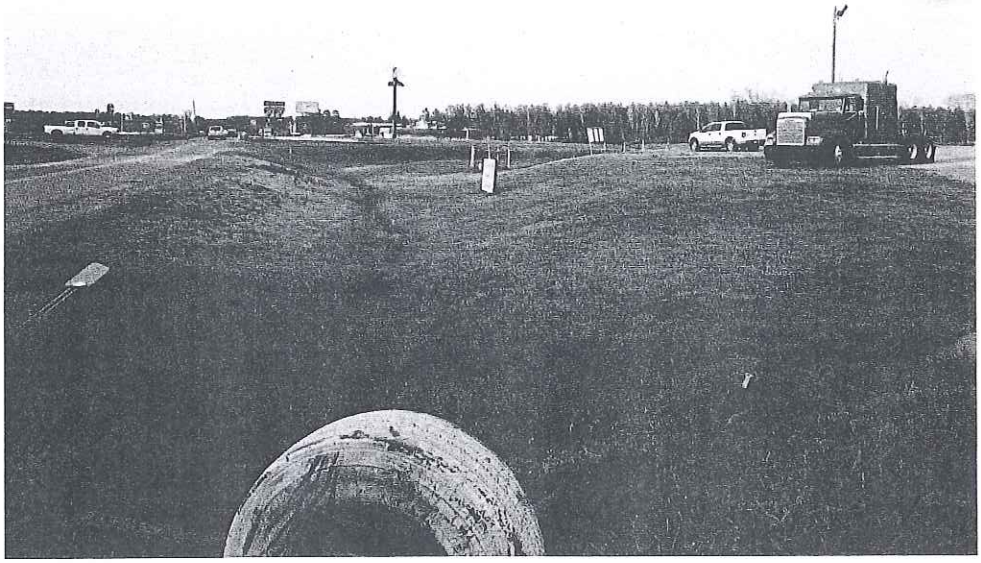
Diesel Dispenser at 1629 Hwy 531 shell gas station



LA 531 Overpass – (looking east)



LA 531 Overpass – (looking east)



Existing and Required ROW along LA 531 (looking north)
South of I-20, East of LA 531

LA 531 Overpass (looking north)

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

CERTIFICATE OF UNDERGROUND STORAGE TANK REGISTRATION

Expires June 30, 2013

FY 2013

Certificate No. REG20120001

Act 336 of the 1995 Regular Session of the Legislature amended the Louisiana Revised Statutes, Section 30:2194.1 to read: "On or after January 1, 1996, no person shall place or dispense a regulated substance into an underground storage tank that has not been registered with the Louisiana Department of Environmental Quality."

This certificate shall serve as proof of registration for the owner,facility, and number of underground storage tanks as specified below:

FACILITY INFORMATION	NO. OF TANKS	OWNER INFORMATION
Agency Interest No. 26704	4	Owner Identification No. 5630
Minden Truck Center LLC 1745 Hwy 531		Minden Truck Center LLC 402 E Washington
Minden LA 71055		Shreveport LA 71104

THIS CERTIFICATE DOES NOT CERTIFY COMPLIANCE WITH THE 1998 UST UPGRADE REQUIREMENTS

Environmental Scientist Manager
Underground Storage Tank & Remediation Division

THIS CERTIFICATE SHALL BE PROMINENTLY DISPLAYED AT THE SPECIFIED FACILITY.

Any deviation from the information provided on this certificate, including the number of tanks, shall make this certificate null and void.

BOBBY JINDAL
GOVERNOR

PEGGY M. HATCH
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF MANAGEMENT & FINANCE

Mr. Gerald H. Schiff
Minden Truck Center, LLC
150 Pintail
St. Rose, LA 70087

MAR 15 2013

Re: Motor Fuels Trust Fund Reimbursement Request
Minden Truck Center
1745 Highway 531
Minden, Louisiana (Webster Parish)
AIN 26704
Trust Fund Nos. TF-13-0494 & TF-13-0495
Incident No. 43705

Dear Mr. Schiff:

On February 11, 2013, our office received claims requesting a total of $17,977.43 for the above-referenced incident.

A review of the latest claims has been made to determine the appropriateness and the accuracy of the requests. By copy of this letter, the Motor Fuels Trust Fund Section is recommending that a check be issued to Jones Environmental, Inc., in the amount of $17,977.43. If the check is not received after three weeks, please contact Susan Landry of the Financial Services Division at (225) 219-3883.

Should you have any questions, please contact Ms. Andréa M. Huval at (225) 219-3920.

Sincerely,

E. Denise Stafford
Accountant Administrator

EDS/JB/AMH
Enclosures
c: DEQ Financial Services, Accounts Payable, w/W-9 (72-1022506)
Jones Environmental, Inc.
708 Milam Street, Suite 100
Shreveport, LA 71101

Financial Services Division – Motor Fuels Trust Fund Section

Originator: Andrea Huval	Date: 2/25/13	App. Due Date 3/11/13

AIN 26704 Process TF No(s). TF-13-0494 & TF-13-0495

Eligibility Determination No. _____ Other: _____

	INITIALS	DATE		INITIALS	DATE
Staff Reviewer	J.F.	3-5	Acct. Administrator	[illegible]	3/11/13
Supervisor	[illegible]	3/7/13	Other		
Comments					

(1) EDMS cover sheets for apps.

GWTU Payment – Copy of Part 5 to Megan _____ Last Letter for Site with Treatment Unit– Give Megan Copy of Letter

Deficiency Letter - FAX No. _____ to _____

Copying/Mailing Instructions _____

RETURN APPLICATION TO OWNER RAC (Party who would have received payment).

APPLICATION CHECKLIST (revised 1-26-10)

113-0494	13-0495			←Enter each application number here. A "✓" indicates an item is acceptable. "NA" indicates that an item is not applicable. If an entire section is no applicable, mark "Not applicable ✓"
				SECTION 1 - CURSORY REVIEW (All Applications)
–	–			If 1st application, release(s) deemed eligible & proof of payment of deductible for eligible charges provided
✓	✓			Part 1, 2nd page - Preparer's original signature provided.
✓	✓			Part 2 & 3 Affidavits are complete, properly executed & payment designations are in agreement.
✓	✓			W-9 provided for party identified on Part 2 and 3 receiving payment
✓	✓			Charges in application in correct event category
✓	✓			Processing of the application will NOT result in CAP exceedance
✓	✓			RAC & subcontractor's invoices contain detailed breakdown of costs.
✓	✓			Backup documentation provided (drilling logs, manifests, receipts, NPDES results for excursions)
✓	✓			All invoices directly to owner address a period of time that is NOT more than a single FY year (July – June)
✓	✓			Per Occurrence Maximum NOT exceeded – Letter sent at $500,000 for $1,000,000 sites.
				SECTION 2 - DETAILED APPLICATION REVIEW (All applications)
✓	✓			TF is NOT recommending payment on work over 2 years old – Part 5, Section 11 (Exception: 1st applications when release date is before 6/30/99)
✓	✓			Program Grand Task Totals on Part 1, Part 2, Part 3 and Part 5 in Agreement
✓	✓			Quarterly Sampling of Wells - Verified that wells sampled were required (Sites w/active treatment units - wells under RECAP/Matrix standard for 4 quarters wells should only be sampled annually).
–	–			Annual Sampling of All Wells – Enter last date when all wells sampled _____
✓	–			Groundwater reporting frequency was approved for Q (SA) A
✓	✓			Per occurrence, annual aggregate & fiscal years amounts shown on Part 5
–	–			Team Leader contacted on questionable charges.
(Not Applicable)				**SECTION 3 - CORRECTIVE PLAN CHARGES**
✓	✓			Copies of Approved Budget Pages for CAP in File and Noted on Fact Sheet
✓	✓			Remediation Oversight Group (ROG) review – CAP adds. (*Unless* initial plan recommends the removal of less than 500 cy of contaminated soil/fill or fewer than 8 Enhanced Fluid Recovery (EFR) events).
✓	✓			Approved CAP Amounts and Dates Approved Shown on Claim Summary Sheet (yellow)
✓	✓			Remaining CAP Balance $ 98,825.75 (current total) for each application shown on Part 5.
–	–			For a total remaining CAP balance below $50,000.00 – language added to letter regarding six month CAP addendum requirement.
✓	✓			Treatment Unit at Site - O/M's approved for: 2 X Week Weekly (2 X Month) Monthly
✓	✓			Treatment Unit at Site - Discharge Monitoring – If frequency more than monthly, verified reason why & obtained necessary documentation for excursions
(Not Applicable ✓)				**SECTION 4 - FIRST APPLICATION FOR A RELEASE AS PER PART 1, SECTION 3.a**
				Copy of deductible affidavit or cancelled check placed on left hand side of folder & flagged
				On Part 5, subtracted deductible(s) from payment and noted the incident number(s) the deductible(s) cover
(Not Applicable ✓)				**SECTION 5 - ASSESSMENT WORK**
				Total assessment work does not exceed approved work plan
(Not Applicable ✓)				**SECTION 6 - RECAP CHARGES IN APPLICATION**
				RECAP – Appendix I Only - $6,720.00
				RECAP – Appendix I Only & diesel or oil are analyzed — additional $500.00
				RECAP – Appendix I Only & more than 20 borings — additional $500.00
				RECAP – MO-1 Only — $3,360.00
				Sites with Enclosed Structure Concerns — additional $500.00
				RECAP – Input Parameters Form Only — $560.00
(Not Applicable ✓)				**SECTION 7 - TREATMENT UNIT PURCHASE/SALE**
				Amount paid for treatment unit shown on Part 5
				Part 7, 8 and copy of invoice for treatment unit given to Megan & placed on left side of folder
				Copies of 3 bids provided and amount paid is lowest bid amount
				TL/RAC contacted about disposition of demobbed GWTS, noted in file, and information given to Megan
(Not Applicable ✓)				**SECTION 8 - LAST APPLICATION FOR SITE PER PART 1, SECTION 3.b**
				Indicated "Last Application for Incident No.(s) _____" on Part 5
				If treatment unit was at site, included paragraph regarding future use of treatment unit & noted on route slip that Megan gets copy of letter

Form **W-9**
(Rev. January 2005)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)
Jones Environmental, Inc.

Business name, if different from above

Check appropriate box: ☐ Individual/ Sole proprietor ☑ Corporation ☐ Partnership ☐ Other ▶ ..... ☐ Exempt from backup withholding

Address (number, street, and apt. or suite no.)
908 Milam St. Suite 100

Requester's name and address (optional)

City, state, and ZIP code
Shreveport LA 71101

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. *If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.*

Social security number
| | | | | | | | | |

or

Employer Identification number
72-1166150

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. person (including a U.S. resident alien).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)

Sign Here | Signature of U.S. person ▶ [signature] Date ▶

Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee.

Note. *If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.*

For federal tax purposes you are considered a person if you are:

- An individual who is a citizen or resident of the United States,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or
- Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the recipient has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

9/27/2012

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
INCIDENT REPORT

Incident ID: 143198

Incident Description

Incident Type:	UST, Release Unknown
Incident Date:	8/10/2012 00:00:00
Parish:	Webster
Municipality:	Minden
Location:	Minden Truck Center - 1745 Hwy. 531 - Minden
Lat/Lon:	
Basin/Segment:	
Substance(s):	Gasoline
Media Impacted:	Soil
Incident Desc:	s12-16272 UST - gasoline; appears to be related to a UST. col

Incident Status

Lead Investigator:	Greg Mccarty
Incident Region:	Northwest
Incident Status:	Referred to USTD for TL Assignment
Followup Status:	Referred to USTD for TL Assignment
As Of:	9/27/2012 00:00:00

Incident Reporter 1

Received By:	Spo Contact
Received Date:	9/12/2012 08:56:00
Dispatch #:	s12-16272
Reported By:	Bezany Branton
Phone:	318-226-8444 (Work phone number)
Reporter Title:	
Organization:	Jones Environmental Inc.
Address:	708 Milam St., Suite 100
Municipality:	Shreveport
State:	LA
Zip Code:	71011
Comments:	

Incident Source 1

Source Name:	Minden Truck Center LLC
Address:	1745 Hwy 531
Municipality:	Minden
State:	LA
Phone:	3182191212 (Work phone number)
Parish:	Webster
AI #:	26704
Related Permits:	
Comments:	(Confirmed release date = 8/23/2012). During UST closure activities, gasoline constituents were detected in soil samples that exceed RS SS. Gasoline will be added to the on-going remediation project. Referred to USTD for TL Assignment.

BOBBY JINDAL
GOVERNOR

PEGGY M. HATCH
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

March 20, 2013

Mr. Harold Rosbottom
Rosbottom Interests
2640 Youree Drive
Shreveport, LA 71104

RE: Semi-Annual July - December 2012 Groundwater Monitoring Report Approval
Revised RECAP Standards Report Request
Minden Truck Center, LLC-Trucker's Paradise Facility; Agency Interest (AI) No. 26704
UST Facility ID No. 60-003666; Incident I.D. No. 43705
1745 Highway 531, Minden, Louisiana; Webster Parish

Dear Mr. Rosbottom:

The Underground Storage Tanks and Remediation Division (USTRD) has completed review of the above-referenced report dated January 21, 2013, submitted on your behalf by Jones Environmental, Inc. (JEI). Thank you for providing this information.

The report conforms to the requirements of the Underground Storage Tank (UST) Groundwater Monitoring and Reporting Guidance Document and will be added to our file for future reference. Gauging and sampling of monitoring wells MW's 3, 6, 7, 9, 10 and 11 for TPH-D should continue on a semi-annual basis. Gauging and sampling of all wells for BTEX, MTBE and TPH-G should continue on a quarterly basis until four consecutive quarters of analytical data is available to determine a new sampling schedule. Wells where phase-separated hydrocarbons (PSH) are present should only be gauged to measure thickness of phase. Gauging and sampling of all monitor wells that do not contain PSH should continue on an annual basis for TPH-D. In addition, those wells that are necessary to develop a groundwater potentiometric surface map may be gauged during the quarterly sampling events. In order to ensure data quality, please be sure to include the laboratory data quality assurance/quality control information listed in LDEQ's Risk Evaluation/Corrective Action Program (RECAP), Section 2.4(4)(a)-(i) with the laboratory analytical report.

Based on the findings from the UST closure conducted on August 8, 2012 and the results from the recent groundwater sampling event, the recommendation to conduct a Revised RECAP Evaluation to establish RECAP standards for BTEX, MTBE, TPH-G and TPH-G fractions is approved. The Revised RECAP Standards Report should be submitted to the Department no later than June 21, 2013. It should be noted if it appears the Corrective Action Plan (CAP) budget is due to expire in six months or less, please submit a CAP Addendum to ensure corrective action activities continue until the site has achieved closure requirements.

Please contact me at (318) 676-7629 with any questions and when field activities are scheduled to begin. All correspondence must include the **AI number** and be submitted in triplicate to: Thomas F. Harris, Administrator, Underground Storage Tanks and Remediation Division, P. O. Box 4312, Baton Rouge, LA 70821-4312.

Thank you for your cooperation.

Sincerely,

Greg McCarty, Geologist
Underground Storage Tanks and Remediation Division

c: Imaging Operation - UST
Gary Fulton, LDEQ - USTD
Roger Bright, JEI, 708 Milam Street, Suite 100, Shreveport, LA 71101

STATE OF LOUISIANA
UNDERGROUND STORAGE TANK CLOSURE/ASSESSMENT FORM – PLEASE TYPE

Please complete and return within sixty (60) days after UST system closure or change-in-service

Return to:
LDEQ - UNDERGROUND STORAGE TANK & REMEDIATION DIVISION
Appropriate Regional Office See attached mailing list or USTRD Submittal Information at www.deq.louisiana.gov
Questions: (225) 219-3181

DEQ Agency Interest Number 26704
DEQ Facility ID Number 60-003666

RECEIVED
Underground Storage Tank Division

I. OWNERSHIP OF TANKS

IF OWNER'S ADDRESS CHANGED, PLEASE CHECK ☐
Minden Truck Center, LLC
OWNER NAME (CORPORATION/INDIVIDUAL, ETC.)
402 East Washington Avenue
MAILING ADDRESS
Shreveport LA 71104
CITY STATE ZIP
Caddo
PARISH/COUNTY
(318) 219-1212
TELEPHONE (INCLUDE AREA CODE)
Crystal Chandler
NAME OF CONTACT PERSON

II. LOCATION OF TANKS

IF SAME AS SECTION I, PLEASE CHECK ☐
Minden Truck Center, LLC
FACILITY NAME OR COMPANY SITE IDENTIFIER
1745 Highway 531
STREET ADDRESS (P. O. BOX NOT ACCEPTABLE)
Minden LA 71055
CITY STATE ZIP
Webster
PARISH
(318) 219-1212
TELEPHONE (INCLUDE AREA CODE)
N/A
CONTACT PERSON AT THIS LOCATION

Tank Division
11-20-2012
Staff Assigned: Carla
26704

III. TANK INFORMATION (Attach Continuation Sheets If Necessary)

DEQ ASSIGNED TANK NUMBERS	SIZE OF TANKS (GALLONS)	PRODUCT LAST STORED IN TANK	CHOOSE ONE PER TANK 1 = Removed 2 = Closed-In-Place 3 = Change-In-Service 1 4 = Removed & Replaced 2	TANK PROPERLY LABELED? Yes	TANK PROPERLY LABELED? No	HIGHEST LEL OR OXYGEN READING 3 LEL 4	HIGHEST LEL OR OXYGEN READING 3 Oxygen	DATE OF CLOSURE OR CHANGE-IN-SERVICE
10434	15,000	Diesel	1	☒	☐		<5%	Aug 10, 2012
10435	8,000	Gasoline	1	☒	☐		<5%	Aug 10, 2012
10436	8,000	Gasoline	1	☒	☐		<5%	Aug 10, 2012
10437	8,000	Gasoline	1	☒	☐		<5%	Aug 10, 2012
				☐	☐			

1 - Indicate the non-regulated substance to be stored in the tank.
2 - A registration form addressing the replacement tank must be completed.
3 - Highest reading recorded just before tank removed from excavation.
4 - Lower Explosive Limit

IV. TANK

A. Date cleaned: 8/8,9/12
B. Date disposed/recycled: Aug 14, 2012
C. Name of disposal site/recycling site: General Scrap

V. TANK SLUDGES

A. Date disposed/recycled: N/A
B. Volume removed (cu/yds): N/A
C. Name of disposal site: N/A

VI. TANK WATERS/WASHWATERS

A. Date disposed/recycled: 8/8,9/12
B. Volume removed (gals): 500
C. Name of disposal/recycling site: Navarro Services

VII. CONTAMINATED SOIL

A. Date removed: N/A
D. Date disposed: N/A
B. Volume of soil removed (cu/yds): N/A
C. Name of disposal site: N/A

VIII. CONTAMINATED GROUNDWATER

A. Date removed: N/A
D. Date disposed: N/A
B. Volume of groundwater removed (gals): N/A
C. Name of disposal site/recycler: N/A

IX. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

PRINT OR TYPE OWNER'S NAME	OWNER'S SIGNATURE	DATE
Gerald H. Schiff, Member	Gerald H. Schiff	9-12-12

PRINT OR TYPE NAME OF CERTIFIED WORKER	SIGNATURE OF CERTIFIED UST WORKER	CERTIFICATE NO.	DATE
William Jones	Will Jones	C-0731	8/30/12

FORMS THAT DO NOT INCLUDE THE OWNER'S AND UST WORKER'S SIGNATURES WILL BE REJECTED.

LDEQ RESPONSE - DO NOT WRITE BELOW THIS LINE

☐ UST system removed from database; no further action required at this time.
☐ Referred for remediation review.
☐ UST system removed from database; additional information required. Gasoline release detected. Further investigation required.

Signature of LDEQ Representative: Jay McCay Telephone No. (318) 676-7625 Date 10/31/12 Supervisor's Initials: MM

UST-SURV-02 **** INCOMPLETE FORMS MAY BE REJECTED **** Revised 12/10

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
FIELD INTERVIEW FORM

AGENCY INTEREST#: 26704 INSPECTION DATE: 8/8/12 TIME OF ARRIVAL: 10:00

ALTERNATE ID#: 60-003666 (ID Type/Number) DEPARTURE DATE: 8/10/12 TIME OF DEPARTURE: 12:00

FACILITY NAME: Minden Truck Center - Trucker's Paradise Facility PH #: (318) 219-1212

LOCATION: 1745 Hwy 531, Minden, LA 71055

PARISH NAME: Webster

RECEIVING STREAM (BASIN/SUBSEGMENT): -

MAILING ADDRESS: 402 E. Washington (Street/P.O. Box) Shreveport (City) LA (State) 71104 (ZIP)

FACILITY REPRESENTATIVE: Crystal Chandler TITLE: Regional Mgr

FACILITY REPRESENTATIVE PHONE NUMBER: (318) 219-4280

NAME, TITLE, ADDRESS and TELEPHONE of RESPONSIBLE OFFICIAL (if different from above):

INSPECTION TYPE: UST - Closure PROGRAM INVOLVED: AIR WASTE WATER (OTHER) UST

INSPECTOR'S OBSERVATIONS: (e.g. AREAS AND EQUIPMENT INSPECTED, PROBLEMS, DEFICIENCIES, REMARKS, VERBAL COMMITMENTS FROM FACILITY REPRESENTATIVES)

Conduct site visit to observe UST closure activities. Total of four tanks to be removed. Confirmation samples to be collected and analyzed for gasoline and diesel. Tanks were emptied and triple rinsed. Groundwater did not appear to be encountered. Backfill was sampled then returned to the tank hold. This facility is already conducting remediation activities for a previous diesel release. Depending on confirmation sample results, diesel RECAL standards will apply but standards for gas may be required.

AREAS OF CONCERN:

REGULATION	EXPLANATION	CORRECTED?
		YES NO
		YES NO

PHOTOS TAKEN: ☐ YES ☑ NO SAMPLES TAKEN: ☐ YES ☑ NO (Attach Chain-of-custody)

RECEIVED BY: SIGNATURE:

PRINT NAME:

(NOTE: SIGNATURE DOES NOT NECESSARILY INDICATE AGREEMENT WITH INSPECTOR'S STATED OBSERVATIONS)

INSPECTOR(S): Greg McCarty (318) 676-7629 CROSS REFERENCE: NA

ATTACHMENTS: NA

REVIEWER:

NOTE: The information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.

Search

Intranet ⟐ Engineering ⟐ Wells

Wells located within 0.2 mile radius
of Latitude 32°34'50" and Longitude 93°14'52"

Parish	Section	Owner Name	DOTD Well #	Owner Well #	Driller's Name	Well Depth (ft)	Well Use	Casing Size (in)	Drill Date	Water Level (ft)	W.L. Date Measured	Geologic Unit	Latitude	Longitude	Avail Info	Distance in Miles
Webster	001	MINDEN TRUCK CT	- 6506Z	MW-7	JONES BROTHERS	25	MONITOR	4	06/02	16.00	07/16/02	112UPTC	323454	931451	D W	0.0782
Webster	001	MINDEN TRUCK CT	- 6505Z	MW-6	JONES BROTHERS	25	MONITOR	4	05/02	15.00	07/16/02	112UPTC	323454	931450	D W	0.0831
Webster	001	MINDEN TRUCK CT	- 6504Z	MW-5	JONES BROTHERS	25	MONITOR	4	05/02	15.00	07/16/02	112UPTC	323454	931449	D W	0.0906
Webster	001	MINDEN TRUCK CT	- 6503Z	MW-4	JONES BROTHERS	25	DESTROYED	4	06/02	12.00	07/16/02	112UPTC	323455	931450	D W	0.101
Webster	001	MINDEN TRUCK CT	- 6502Z	MW-3	JONES BROTHERS	25	MONITOR	4	06/02	16.00	07/16/02	112UPTC	323454	931450	D W	0.0831
Webster	001	MINDEN TRUCK CT	- 6501Z	MW-2	JONES BROTHERS	25	MONITOR	4	06/02	16.00	07/16/02	112UPTC	323453	931450	D W	0.0659
Webster	001	MINDEN TRUCK CT	- 6500Z	MW-1	JONES BROTHERS	25	MONITOR	4	06/02	16.00	07/16/02	112UPTC	323453	931450	D W	0.0659
Webster	001	MINDEN TRUCK CT	- 6571Z	MW-9	WALKER-HILL(LA)	25	MONITOR	4	05/03	15.00	05/01/03	112UPTC	323453	931450	D W	0.0659
Webster	001	MINDEN TRUCK CT	- 6570Z	MW-8	WALKER-HILL(LA)	25	DESTROYED	4	05/03	15.00	05/01/03	112UPTC	323453	931450	D W	0.0659
Webster	001	MINDEN TRUCK CT	- 6686Z	MW-12	WALKER-HILL(LA)	25	MONITOR	4	12/04	9.00	01/05/05	00000000	323453	931450	D W	0.0659
Webster	001	MINDEN TRUCK CT	- 6685Z	MW-11	WALKER-HILL(LA)	25	MONITOR	4	12/04	13.00	01/05/05	00000000	323453	931450	D W	0.0659
Webster	001	MINDEN TRUCK CT	- 6684Z	MW-10	WALKER-HILL(LA)	25	MONITOR	4	12/04	14.00	01/05/05	00000000	323452	931451	D W	0.0415
Webster	001	ROSBOTTOM INTER	- 7056Z	MW-14	JONES/	25	MONITOR	4	10/08	14.31	10/31/08	00000000	323453	931450	D W	0.0659
Webster	001	ROSBOTTOM INTER	- 7055Z	MW-13	JONES/	25	MONITOR	4	10/08	16.12	10/31/08	00000000	323453	931450	D W	0.0659

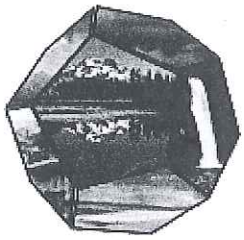
Available Information:
E - Geophysical Log
D - Driller's Log
M - Mechanical Analysis
Q - Quality of Water
P - Pumping Test
W - Water Level
B - Bacteriological Analysis

EPA United States Environmental Protection Agency

EPA's Region 6 Office

Serving: Arkansas, Louisiana, New Mexico, Oklahoma, Texas, and 66 Tribal Nations

Louisiana Site Status Summaries



You will need Adobe Acrobat Reader, available as a free download, to view these files. See EPA's PDF page to learn more about PDF, and for a link to the free Acrobat Reader.

Agriculture Street Landfill (PDF, 4 pp, 48K)
American Cresote Works, Inc. (Winnfield Plant) (PDF, 2 pp, 44K)
Bayou Bonfouca (PDF, 3 pp, 125K)
Bayou Sorrel (PDF, 3 pp, 107K)
Calcasieu Estuary (Formerly Bayou D'Inde)
Central Wood Preserving (PDF, 2 pp, 48K)
Cleve Reber (PDF, 3 pp, 51K)
Combustion, Inc. (PDF, 4 pp, 77K)
D. L. Mud (PDF, 3 pp, 88K)
Delatte Metals (PDF, 5 pp, 99K)
Devil's Swamp Lake (PDF, 4 pp, 98K)
Dutchtown Treatment Plant (PDF, 2 pp, 39K)
Gulf Coast Vacuum Services (PDF, 3 pp, 92K)
Gulf States Utilities - North Ryan Street (PDF, 3 pp, 41K)
Highway 71/72 (Old Citgo) Refinery (PDF, 4 pp, 363K)
Lincoln Creosote (PDF, 2 pp, 40K)
Louisiana Army Ammunition Plant (PDF, 3 pp, 111K)
Madisonville Creosote Works (PDF, 3 pp, 99K)
Mallard Bay Landing Bulk Plant (PDF, 2 pp, 36K)
Marion Pressure Treating Company (PDF, 4 pp, 77K)
Old Inger Oil Refinery (PDF, 3 pp, 88K)
Pab Oil & Chemical Service, Inc. (PDF, 4 pp, 55K)
Petro-Processors of Louisiana, Inc. (PDF, 4 pp, 81K)

Regional Information

- Region 6 Superfund Home
- Brownfields
- CERCLIS
- Decision Documents
- Fact Sheets/Info Bulletins
- Five Year Reviews
- Land Revitalization
- Superfund Redevelopment Initiative
- NPL List
- Outreach Guides
- Prevention and Response
- Emergency Response Actions
- Public Liaison
- Site Summaries for Arkansas
- Site Summaries for Louisiana
- Site Summaries for New Mexico
- Site Summaries for Oklahoma
- Site Summaries for Texas
- More...
- Contact Region 6 Superfund

National Information

- Superfund Home
- Basic Information

Ruston Foundry (PDF, 6 pp, 97K)

Southern Shipbuilding (PDF, 3 pp, 78K)

Contact the Region 6 Superfund Division

http://www.epa.gov/region6/6sf/6sf-la.htm

- Superfund Sites Where You Live
- Contaminated Media, Human Health, & Environmental Effects
- Accomplishments & Performance Measures
- Cleanup Process
- Community Involvement
- Training & Learning Center
- Laws, Policy & Guidance
- Emergency Response
- Enforcement
- Superfund EnEspañol
- Related Links

Last updated on Wednesday, May 08, 2013

Minden (city), Louisiana

People QuickFacts	Minden	Louisiana
Population, 2011 estimate	13,106	4,574,766
Population, 2010 (April 1) estimates base	13,082	4,533,372
Population, percent change, April 1, 2010 to July 1, 2011	0.2%	0.9%
Population, 2010	13,082	4,533,372
Persons under 5 years, percent, 2010	6.9%	6.9%
Persons under 18 years, percent, 2010	24.9%	24.7%
Persons 65 years and over, percent, 2010	17.2%	12.3%
Female persons, percent, 2010	53.9%	51.0%
White persons, percent, 2010 (a)	46.2%	62.6%
Black persons, percent, 2010 (a)	51.7%	32.0%
American Indian and Alaska Native persons, percent, 2010 (a)	0.2%	0.7%
Asian persons, percent, 2010 (a)	0.3%	1.5%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	Z	0.0%
Persons reporting two or more races, percent, 2010	1.2%	1.6%
Persons of Hispanic or Latino origin, percent, 2010 (b)	1.4%	4.2%
White persons not Hispanic, percent, 2010	45.4%	60.3%
Living in same house 1 year & over, percent, 2007-2011	82.4%	85.1%
Foreign born persons, percent, 2007-2011	1.2%	3.7%
Language other than English spoken at home, percent age 5+, 2007-2011	2.3%	8.8%
High school graduate or higher, percent of persons age 25+, 2007-2011	75.3%	81.6%
Bachelor's degree or higher, percent of persons age 25+, 2007-2011	15.1%	21.1%
Veterans, 2007-2011	1,068	314,677
Mean travel time to work (minutes), workers age 16+, 2007 -2011	18.9	24.9
Housing units, 2010	5,832	1,964,981
Homeownership rate, 2007-2011	57.4%	67.9%
Housing units in multi-unit structures, percent, 2007-2011	17.4%	18.1%
Median value of owner-occupied housing units, 2007-2011	$85,700	$135,400
Households, 2007-2011	5,296	1,675,097
Persons per household, 2007-2011	2.40	2.60
Per capita money income in the past 12 months (2011 dollars), 2007-2011	$18,239	$23,853
Median household income, 2007-2011	$27,572	$44,086
Persons below poverty level, percent, 2007-2011	26.1%	18.4%

Business QuickFacts	Minden	Louisiana
Total number of firms, 2007	1,089	375,808
Black-owned firms, percent, 2007	25.6%	15.9%
American Indian- and Alaska Native-owned firms, percent, 2007	F	0.7%
Asian-owned firms, percent, 2007	F	2.8%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	0.0%
Hispanic-owned firms, percent, 2007	F	2.9%
Women-owned firms, percent, 2007	26.6%	27.4%
Manufacturers shipments, 2007 ($1000)		D 205,054,723

Merchant wholesaler sales, 2007 ($1000)	40,903	51,415,553
Retail sales, 2007 ($1000)	304,295	56,543,203
Retail sales per capita, 2007	$23,536	$12,921
Accommodation and food services sales, 2007 ($1000)	20,569	9,729,869

Geography QuickFacts	Minden	Louisiana
Land area in square miles, 2010	14.97	43,203.90
Persons per square mile, 2010	874.1	104.9
FIPS Code	50885	22
Counties		

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

D: Suppressed to avoid disclosure of confidential information
F: Fewer than 100 firms
FN: Footnote on this item for this area in place of data
NA: Not available
S: Suppressed; does not meet publication standards
X: Not applicable
Z: Value greater than zero but less than half unit of measure shown

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, County Business Patterns, Economic Census, Survey of Business Owners, Building Permits, Consolidated Federal Funds Report, Census of Governments
Last Revised: Thursday, 10-Jan-2013 10:34:10 EST

APPENDIX D

Noise Study Report

TRAFFIC NOISE ANALYSIS

STATE PROJECT No. H.001799.2

F.A.P. No. H.001799

LA 531 OVERPASS/I-12

WEBSTER PARISH

PROJECT BACKGROUND

The proposed project is along LA 531 in Minden, Louisiana from Industrial Drive/I-20 Service Road to Jimmie Batton Road/Taylor in Webster Parish. The proposed roadway is comprised of 4 lanes divided with a median. The bridge between the I-20 eastbound and westbound ramps is such that it needs to be replaced.

PROJECT DESCRIPTION

Alternate 1 – LA 531 Interchange Improvements

Alternate 1 proposes replacing the existing two lane overpass with a widened overpass structure. The widened overpass structure will be striped to accommodate one northbound lane, one southbound lane, and a left turn lane, but will be constructed wide enough to accommodate two northbound lanes, two southbound lanes, and a center left turn lane in the future. LA 531, south of the I-20 eastbound ramp, will be widened to three lanes, adding a right turn lane onto the eastbound I-20 ramp. Two frontage roads will also be installed south of the I-20 and LA 531 interchange to allow safe access to the businesses near the interchange. North of the overpass, LA 531 will be widened to four lanes, and after Industrial Drive, LA 531 will be widened to three lanes, two through lanes and a center two-way left turn lane. The I-20 and LA 531 interchanges would remain as stopped controlled and the LA 531 and Industrial Drive would remain as signal controlled.

Alternate 1A – LA 531 and Industrial Drive Roundabout

Alternate 1A proposes the same improvements as Alternate 1 with the exception of installing a roundabout at the intersection of LA 531 and Industrial Drive instead of having a signal controlled intersection.

Alternate 2 – LA 531 Roundabouts

Alternate 2 proposes replacing the existing two lane overpass with anew overpass and installing single roundabouts at the following intersections: LA 531 and the I-20 eastbound ramp, LA 531 and the I-20 westbound ramp.

Alternate 3 – No Build

Alternate 3 – No work will be done to the current bridge or the project corridor.

PURPOSE & SCOPE

This report analyses noise impact due to the implementation of the proposed project as well as normal traffic growth. Topics discussed include computer modeling and methodology, noise impacts, and abatement methods. Project noise impacts based on the data for the existing and proposed conditions, will be discussed. Noise abatement measures are evaluated for areas where impacts are anticipated. Traffic noise impacts are defined by the LA DOTD as noise levels equaling to or exceeding Noise Abatement Criteria (NAC), or when the predicted traffic noise levels exceed existing levels by 10 dBA. Noise abatement methods will be analyzed for reasonableness and feasibility if noise impact is identified.

DESCRIPTION OF LAND USE

Land usage along the proposed project corridor consists primarily of commercial and residential buildings. According to LA DOTD's Highway Traffic Noise Policy, activity categories included in residential and commercial properties are B and E (see the table below). In the proposed project corridor, development is sparse, not heavy or evenly distributed. All activities center on the vicinity of LA 531 and I-20 interchange.

FIELD MONITORING METHODOLOGY

Field traffic noise survey was conducted on April 16, 2013 using a Precision Integrated Sound Level Meter. The sound level meter was calibrated at the start of the field trip and checked before each measurement. The type 1 sound meter was mounted 5 feet high approximately, to simulate the average height of human ear. During the field survey, a traffic volume count was taken on existing roadways. This traffic data was used to evaluate the accuracy of the noise model. Present traffic data and traffic data for the design year were obtained from the Traffic and Planning Section of LA DOTD. The design year for this noise study is 2035.

MODELING PROCEDURES

FHWA Traffic Noise Model (TNM) 2.5 was used to analyze the noise impacts following the "FHWA Traffic Noise Model User's Guide". Four receivers were modeled. The receivers included dwelling houses, a business along LA 531. Vehicles axle distributions were obtained from Traffic and Planning Section of LA DOTD. Traffic projections for the future year estimates were based on a 2% annual growth. Traffic speed on LA 531 was modeled at 55 mph.

MODEL VALIDATION

Noise measurements were taken in the field at four sites (Minden Truck Center LLC., Residential building opposite pleasant Grove church north of I-20 along LA 531, Residential building at 3115 Hwy 531, and Residential building at 1454 Hwy 531. The receiver for site one (Minden Truck Center) had a noise measurement of 65.9dBA. A noise measurement was modeled using TNM 2.5 for the same receiver and was calculated to be 68.5 dBA. The receiver for site 2 (Residential building opposite pleasant Grove church) had a noise measurement of 56.5dB. A noise measurement was modeled using TNM 2.5 also for the same receiver and was calculated to be 60.2dBA. The receiver for site 3 (Residential building at 3115 Hwy 531) had a noise measurement of 62.5dBA. A noise measurement was modeled using TNM 2.5 also for the receiver and was calculated to be 61.2dBA. For site 4 (1454 Hwy 531), existing noise level was 63.1dBA and calculated noise level was 64.4dBA. The results show existing noise levels within 3dBA of the field measurements and therefore the model is validated.

PREDICTION OF TRAFFIC NOISE LEVEL

Any traffic noise prediction methodology is approved for use in any traffic noise analysis as required by Highway Traffic Noise Policy, if the methodology used at the time is consistent with the requirements of CFR772.9.

Predicted noise levels in the noise report document are in the same format as those read off of the model. To validate model results, it is necessary to compare the noise levels measured in the field to the noise levels predicted by the model using the roadway parameters and traffic data collected in the field. If the model results are within 3dBA of the measured noise levels, no further action is required, and the model can be used to determine future noise levels. If the modeled results are not within 3dBA of the measured noise levels, then further investigation is warranted into the reason(s) for the discrepancy prior to using the model to determine future noise levels.

In predicting noise levels and assessing noise impacts, traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for the design year will be used. The period with the highest sound levels may not be at the peak traffic hour but instead, during some period when traffic volumes are lower but the truck mix or vehicle speeds are higher.

Future noise levels will be based on modeling results utilizing data for the design year. This data, including traffic volumes, composition and speed, other reasonably foreseeable development, and the implementation of other transportation projects, will be based on accepted engineering practice and local planning assumptions.

DETERMINATION OF TRAFFIC NOISE IMPACTS

Traffic noise impacts occur when the future (predicted design year, build and no-build conditions) noise levels approach or exceed the FHWA Noise Abatement Criteria, or when the future noise levels exceed the existing noise levels at any sensitive receptor by 10 dBA. FHWA requires that the States define approach as at least 1 dBA below their Noise Abatement Criteria.

FHWA Noise Abatement Criteria

Hourly A-weighted Sound Level decibels (dBA)

ATIVITY CATEGORY	ACTIVITY LEQ (h)	EVALUATION LOCATION	ACTIVITY DESCRIPTION	IN LOUISIANA, IMPACTS OCCURS WHEN NOISE LEVEL IS EQUAL TO OR GREATER THAN THE VALUES BELOW*
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	56
B	67	Exterior	Residential (includes undeveloped lands permitted for residential).	66
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship,	66

			playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, television studios, trails, and trail crossings. (Includes undeveloped lands permitted for these activities).	
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	51
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (Includes undeveloped lands permitted for these activities).	71
F	--------	--------	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	n/a
G	--------	---------	Undeveloped lands that are not permitted	n/a

*These values are consistent with the FHWA's requirement for consideration of traffic noise impacts 1 dBA below their noise abatement criteria.

EVALUATION OF NOISE ABATEMENT

When traffic noise impacts are identified, noise abatement shall be considered and evaluated for *feasibility* and *reasonableness*. Traffic noise impacts will be determined and alternative noise abatement measures analyzed by giving weight to the benefits and cost of abatement, and the overall social, economic and environmental impacts.

In abating traffic noise impacts, primary consideration is given to exterior areas where frequent human use occurs and a lowered noise level would be of benefit.

The noise abatement measures listed below may be incorporated into the Type 1 Federal or Federal-aid projects to reduce traffic noise impacts.

(1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable barrier;

(2) Traffic management measures (e.g.; traffic control devices and signing for prohibiting of certain vehicle types, time-use restrictions for certain vehicles types, modified speed limits and exclusive lane designations);

(3) Alteration of horizontal and vertical alignments;

(4) Acquisition of property rights (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise.

(5) Noise insulation of Activity category D land use facility listed in Table 1. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

FEASIBILIY

For a noise barrier to be considered feasible, 75% of the first row of impacted receptors adjacent to the barrier must achieve at least a 5 dBA reduction in highway traffic noise.

Other feasibility factors that will be considered are safety, barrier height, topography, drainage, utilities, maintenance of the abatement measure, and access to adjacent properties.

DOTD will not build noise barriers that it considered unsafe to the travelling public or adjacent properties. Topography and drainage may impact the design of the barrier or make the barrier un feasible to construct. Utilities may render a barrier unfeasible when a conflict between the utility and barrier exists and the utility cannot be moved or cannot be moved without creating other insurmountable problems. (Note that the cost to relocate a utility will be added to the cost of the barrier when the relocation is necessary for the construction of the barrier. If this relocation cost is large, the barrier, although feasible, may become unreasonable due to cost). DOTD must be able to access the barrier for maintenance purposes. If access cannot be obtained, the barrier is unfeasible. When access to the adjacent properties must be maintained, a barrier may be unfeasible if it cannot be designed to provide the needed access. Noise barriers that block existing driveways are considered unfeasible; however, there may be situations whereby the property owners agree in writing to forfeit their access eliminating this concern. Situations may arise whereby access is needed for seasonal activities such as maintenance or management of adjacent properties. These situations will be considered on case by case bases.

Noise barrier on bridges are limited to a maximum height of 14 feet, measured from top of noise barrier to bridge slab. Costs associated with mounting the barrier to the bridge, including the cost to modify the bridge structure to support the barrier, will be added to the cost of the barrier for determining reasonableness.

REASONABLENESS

For abatement measure to be considered reasonable all the following three criteria must be met: (a) achievement of the noise reduction goal, (b) cost effectiveness, and (c) concurrence of benefited receptors

(a) Noise Reduction Design Goal: When noise abatement measures are being considered, every effort will be made to obtain a substantial noise reduction of at least 8 dBA. At a minimum, at least one receptor must receive an 8 dBA reduction for the noise abatement system to be reasonable. For noise barriers meeting the above mentioned criteria, the height and length of the barrier will be optimized using the cost/benefited receptor ratio.

(b) Cost Effectiveness: The cost estimate of the noise abatement measures (including but not limited to the cost of real estate acquisition, construction servitude or utility relocation) should be equal to or less than $35,000 per benefited receptor. The unit cost used to estimate the cost of likely barriers will be updated regularly (at least every five years) and published on DOTD's web site. The final analysis

regarding cost effectiveness will occur during design when more detailed information is available regarding the cost of the barrier system.

(c) Consideration of Viewpoints: As part of the NEPA public involvement process, viewpoints from the community, including benefited receptors, will be solicited for all aspects of the project, including noise impacts and abatement. Public Involvement will be tailored to the project. If no relevant objections to the proposed noise abatement are made at this level of public involvement, this criteria is deemed met and abatement considered reasonable from the viewpoint of benefit receptors. If relevant objections are identified, a follow-up solicitation will occur with property owners and residents of the benefited receptors. The abatement measure will be considered reasonable from the viewpoint of benefiting receptors if 50% or more of the responses received are positive. Follow-up coordination with benefited receptors may occur during the design stage when more detail information is available regarding barrier design.

CONCLUSIONS AND RECOMMENDATIONS

According to the noise abatement criteria set in the LA DOTD Highway Traffic Noise Policy, a noise barrier must be feasible and reasonable before it can be proposed. Feasibility includes concerns such as engineering, maintenance, safety, and drainage issues. For a noise wall to be effective in reducing noise impacts, it must not be interrupted and the wall length should be four times the receptor distance. For the proposed project, this section of highway is sparsely populated and has driveways and through streets crossing LA 531. The streets and drive ways will interrupt the noise wall and render it ineffective. Traffic management measures (traffic control devices, reduced speed limits, signing for vehicle type restrictions or time use restrictions, or traffic assignments) may be used to reduce noise impacts, however, lowering speed limit may result in more congested highways. LA DOTD cannot use time-use restrictions for certain vehicle types on a State or Federal highway. High costs and limited corridor space for the roadway inhibit the purchase of additional right-of way for any additional alteration of horizontal or vertical alignments. In both build and no-build scenarios of this report, there are no noise impacts. This is due to low volume of traffic along this route. Both residential and commercial properties along this section of LA 531 will not be impacted by traffic noise due to the implementation of the proposed project. Also, due to the interruption of the wall length by the cross streets and drive ways, noise wall is not considered reasonable and feasible for this project, and is therefore not considered.

Construction noise generated as a result of the proposed project will cause temporary impacts to receptors. It is recommended that all construction operations be restricted to working hours whenever possible. All construction equipment such as pumps, compressors, generators, bulldozers, cranes, trucks, etc., should be properly muffled and all motor panels should be closed to reduce the noise impacts. The construction contractor will minimize noise impacts by adhering to the abatement measures stated in Section 107.15 (Environmental Protection) of the *Louisiana Standard Specification for Roads and Bridges.*

LADOTD
EZEKIEL ONYEGBUNAM

20 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: VALIDATION RUN NO 1
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver18	18	2	65.9	68.5	66	2.6	10	Snd Lvl	68.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

LADOTD
EZEKIEL ONYEGBUNAM

20 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: VALIDATION RUN SITE 2
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver7	7	4	56.5	60.2	66	3.7	10	----	60.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	4	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

LADOTD
EZEKIEL ONYEGBUNAM

20 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: SITE 3 VALIDATION RUN
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	No Barrier LAeq1h Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver SITE 3	7	3	62.5	61.2	66	-1.3	10	----	61.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Noise Reduction Avg	Noise Reduction Max
		dB	dB	dB
All Selected	3	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

LADOTD
EZEKIEL ONYEGBUNAM

20 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: VALIDATION RUN NO 4
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver20	20	1	63.1	64.4	66	1.3	10	----	64.4	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	1	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

SP H.001799 (LA 531 OVERPASS at I-20) WEBSTER PARISH

NOISE MEASUREMENT

(MODEL VALIDATION)

Date: Tuesday, APRIL 16, 2013

Time: 12:50 p.m.

Weather: Sunny, 75^{0} F

Site 1 (North /South Bound): Closed Gas, Station southwest of LA 531/I-20

Time Started: 12:50 p.m.

Interval: 15 minutes

Noise Meter Measurement: 65.9 dBA 44 yards away from center of the roadway

Traffic: on LA 531 (2 lane highway, 55 mph)

	Southbound		Northbound	
	Vehicle/15 min	Vehicle/hr	Vehicle/15 min	Vehicle/hr
Cars	79	316	68	272
Medium Trucks	6	24	29	116
Heavy Trucks	14	56	17	68
Buses	0	0	0	0
Motorcycles	0	0	0	0

Site 2 (North/South Bound): Opposite Pleasant Grove Church with cluster of 6 dwelling houses

Time Started: 1:40 p.m.

Interval: 15 minutes

Noise Meter Measurement: 56.5 dBA about 92 yards from roadway

Speed Limit: 55 mph

Traffic: on LA 531 (2 lane Street)

	Southbound		Northbound	
	Vehicle/15 min	Vehicle/hr	Vehicle/15/min	Vehicle/hr
Cars	11	44	13	52
Medium Truck	0	0	3	12
Heavy Truck	0	0	0	0
Buses	0	0	0	0
Motorcycles	0	0	0	0

Site 3 (North/South Bound) 3115 Hwy 531 opposite old Saw mill

Time Started: 2:30 p.m.

Interval: 15 minutes

Noise Meter Measurement: 62.5 dBA 50 yards from roadway

Speed limit: 55 mph

Traffic: on LA 531 (2 Lane Highway)

	Southbound		Nrthbound	
	Vehicles/15 min	Vehicles/hr	Vehicles/15 min	Vehicles/hr
Cars	17	68	5	20
Medium Trucks	0	0	3	12
Heavy Trucks	0	0	2	8
Buses	1	0	0	0
Motorcycles	0	0	1	4

Site 4 (North/South Bound): 1121 Hwy 531

Time Started: 4:10 p.m.

Interval: 15 minutes

Noise Meter Measurement: 63.1 dBA (45 yards from roadway)

Speed limit: 55 mph

Traffic on LA 531

	Southbound		Northbound	
	Vehicles/15 min	Vehicles/hr	Vehicles/15 min	Vehicles/hr
Cars	69	276	61	244
Medium Trucks	5	20	3	12
Heavy Trucks	7	28	4	16
Buses	0	0	1	4
Motorcycles	0	0	0	0

LADOTD
EZEKIEL ONYEGBUNAM

29 May 2013
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: SP H.001799
RUN: 2015 BUILD RUN

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
NORTHBOUND-LA 531	NBOUND 1 +0	26	521	55	39	55	39	55	5	55	2	55
	NBOUND 11+(	27										
SOUTHBOUND LA 531	SBOUND 11+	28	521	55	39	55	39	55	5	55	2	55
	SBOUND 1+ 0	29										

LADOTD
EZEKIEL ONYEGBUNAM

29 May 2013
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: SP H.001799
RUN: 2035 BUILD RUN

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
NORTHBOUND-LA 531	NBOUND 1 +0	26	1118	55	58	55	78	55	9	55	3	55
	NBOUND 11+(	27										
SOUTHBOUND LA 531	SBOUND 11+	28	1118	55	58	55	78	55	9	55	3	55
	SBOUND 1+ 0	29										

LADOTD
EZEKIEL ONYEGBUNAM

29 May 2013
TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: SP H.001799
RUN: 2035 NO BUILD RUN

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
NORTHBOUND-LA 531	NBOUND 1 +0	26	1118	55	58	55	78	55	9	55	3	55
	NBOUND 11+(	27										
SOUTHBOUND LA 531	SBOUND 11+	28	1118	55	58	55	78	55	9	55	3	55
	SBOUND 1+ 0	29										

LADOTD
EZEKIEL ONYEGBUNAM

14 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: 2015 BUILD RUN
BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver7	7	2	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
Receiver8	8	1	0.0	60.2	66	60.2	10	----	60.2	0.0	8	-8.0
Receiver9	9	2	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
Receiver10	10	3	0.0	59.6	66	59.6	10	----	59.6	0.0	8	-8.0
Receiver11	11	3	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
Receiver12	12	1	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
Receiver13	13	3	0.0	59.7	66	59.7	10	----	59.7	0.0	8	-8.0
Receiver14	14	4	0.0	59.1	66	59.1	10	----	59.1	0.0	8	-8.0
Receiver15	15	4	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
Receiver16	16	2	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
Receiver17	17	1	0.0	57.8	66	57.8	10	----	57.8	0.0	8	-8.0
Receiver18	18	2	0.0	58.7	66	58.7	10	----	58.7	0.0	8	-8.0
Receiver19	19	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
Receiver20	20	3	0.0	59.5	66	59.5	10	----	59.5	0.0	8	-8.0
Receiver21	21	3	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
Receiver22	22	1	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
Receiver23	23	2	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
Receiver24	24	3	0.0	59.8	66	59.8	10	----	59.8	0.0	8	-8.0
Receiver25	25	3	0.0	59.4	66	59.4	10	----	59.4	0.0	8	-8.0
Receiver26	26	2	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
Receiver27	27	3	0.0	59.2	66	59.2	10	----	59.2	0.0	8	-8.0
Receiver28	28	3	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
Receiver29	29	1	0.0	59.0	66	59.0	10	----	59.0	0.0	8	-8.0
Receiver30	30	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	54	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

LADOTD
EZEKIEL ONYEGBUNAM

29 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: 2035 BUILD RUN
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver7	7	2	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0
Receiver8	8	1	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0
Receiver9	9	2	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0
Receiver10	10	3	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0
Receiver11	11	3	0.0	57.3	66	57.3	10	----	57.3	0.0	8	-8.0
Receiver12	12	1	0.0	56.5	66	56.5	10	----	56.5	0.0	8	-8.0
Receiver13	13	3	0.0	57.4	66	57.4	10	----	57.4	0.0	8	-8.0
Receiver14	14	4	0.0	56.9	66	56.9	10	----	56.9	0.0	8	-8.0
Receiver15	15	4	0.0	57.6	66	57.6	10	----	57.6	0.0	8	-8.0
Receiver16	16	2	0.0	57.0	66	57.0	10	----	57.0	0.0	8	-8.0
Receiver17	17	1	0.0	54.7	66	54.7	10	----	54.7	0.0	8	-8.0
Receiver18	18	2	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0
Receiver19	19	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
Receiver20	20	3	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
Receiver21	21	3	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
Receiver22	22	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
Receiver23	23	2	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
Receiver24	24	3	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Receiver25	25	3	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
Receiver26	26	2	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0
Receiver27	27	3	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
Receiver28	28	3	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
Receiver29	29	3	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
Receiver30	30	2	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	57	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

LADOTD
EZEKIEL ONYEGBUNAM

29 May 2013
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP H.001799
RUN: 2035 NO BUILD RUN
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier					With Barrier			
				LAeq1h		Increase over existing		Type Impact	Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver7	7	2	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
Receiver8	8	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
Receiver9	9	2	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Receiver10	10	3	0.0	62.6	66	62.6	10	----	62.6	0.0	8	-8.0
Receiver11	11	3	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
Receiver12	12	1	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Receiver13	13	3	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Receiver14	14	4	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
Receiver15	15	4	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
Receiver16	16	2	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
Receiver17	17	1	0.0	60.8	66	60.8	10	----	60.8	0.0	8	-8.0
Receiver18	18	2	0.0	61.7	66	61.7	10	----	61.7	0.0	8	-8.0
Receiver19	19	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
Receiver20	20	3	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
Receiver21	21	3	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
Receiver22	22	1	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
Receiver23	23	2	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
Receiver24	24	3	0.0	62.7	66	62.7	10	----	62.7	0.0	8	-8.0
Receiver25	25	3	0.0	62.4	66	62.4	10	----	62.4	0.0	8	-8.0
Receiver26	26	2	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0
Receiver27	27	3	0.0	62.1	66	62.1	10	----	62.1	0.0	8	-8.0
Receiver28	28	3	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
Receiver29	29	3	0.0	62.0	66	62.0	10	----	62.0	0.0	8	-8.0
Receiver30	30	2	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	57	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX E

ALTERNATIVES COST ESTIMATE, LAYOUT PLANS, & TYPICAL SECTIONS

H.001799 - Roadway Estimated Construction Cost - Alternate 1					
Item	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Price**
202-02-38500	Removal of Surfacing and Stabilized Base	SY	20949	$4	$83,794
203-01-00100	General Excavation	CY	16462	$6	$98,773
203-03-00100	Embankment	CY	82311	$10	$823,106
304-05-00100	Lime Treatment (Type E)	Ton	859	$275	$236,261
502-01-00100	Superpave Asphaltic Concrete	Ton	32986	$80	$2,638,846
	Traffic Signal	LS	1	$450,000	$450,000
				Subtotal of major items	$4,330,780
30% Other Ancillary Items					$1,856,049
18% Mobilization, Construction Layout, Temporary Signs & Barricades					$1,113,629.15
				Subtotal of all items	$7,300,458
				20% Contingency	$1,460,092
				TOTAL	**$8,760,549**

H.001799 - Roadway Estimated Construction Cost - Alternate 1A					
Item	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Price**
202-02-38500	Removal of Surfacing and Stabilized Base	SY	20949	$4	$83,794
203-01-00100	General Excavation	CY	16862	$6	$101,173
203-03-00100	Embankment	CY	84311	$10	$843,107
304-05-00100	Lime Treatment (Type E)	Ton	868	$275	$238,637
502-01-00100	Superpave Asphaltic Concrete	Ton	33373	$80	$2,669,821
707-03-00100	Combination Curb and Gutter	LF	1597	$18	$28,743
				Subtotal of major items	$3,965,275
30% Other Ancillary Items					$1,699,404
18% Mobilization, Construction Layout, Temporary Signs & Barricades					$1,019,642.16
				Subtotal of all items	$6,684,321
				20% Contingency	$1,336,864
				TOTAL	**$8,021,185**

H.001799 - Roadway Estimated Construction Cost - 2					
Item	**Description**	**Unit**	**Quantity**	**Unit Cost**	**Price**
202-02-38500	Removal of Surfacing and Stabilized Base	SY	20949	$4	$83,794
203-01-00100	General Excavation	CY	16855	$6	$101,129
203-03-00100	Embankment	CY	84274	$10	$842,740
304-05-00100	Lime Treatment (Type E)	Ton	736	$275	$202,530
502-01-00100	Superpave Asphaltic Concrete	Ton	32893	$80	$2,631,472
707-03-00100	Combination Curb and Gutter	LF	4724	$15	$70,855
				Subtotal of major items	$3,932,520
30% Other Ancillary Items					$1,685,366
18% Mobilization, Construction Layout, Temporary Signs & Barricades					$1,011,219.46
				Subtotal of all items	$6,629,105
				20% Contingency	$1,325,821
				TOTAL	**$7,954,926**

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Sigma Consulting Group, Inc

ENGINEER: Robert Lear, PE

LICENSE #: LA No. 25394

DATE: 10-24-2016

LA 531

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)

1 inch = 100 ft.

H.005112.5
LA 531 OVERPASS
WEBSTER PARISH

SINGLE LANE ROUNDABOUTS
SCALE: 1" = 100'
10-24-2016

DECEMBER 2015

LINE & GRADE STUDY - DRAFT

SCALE : 1" = 100'

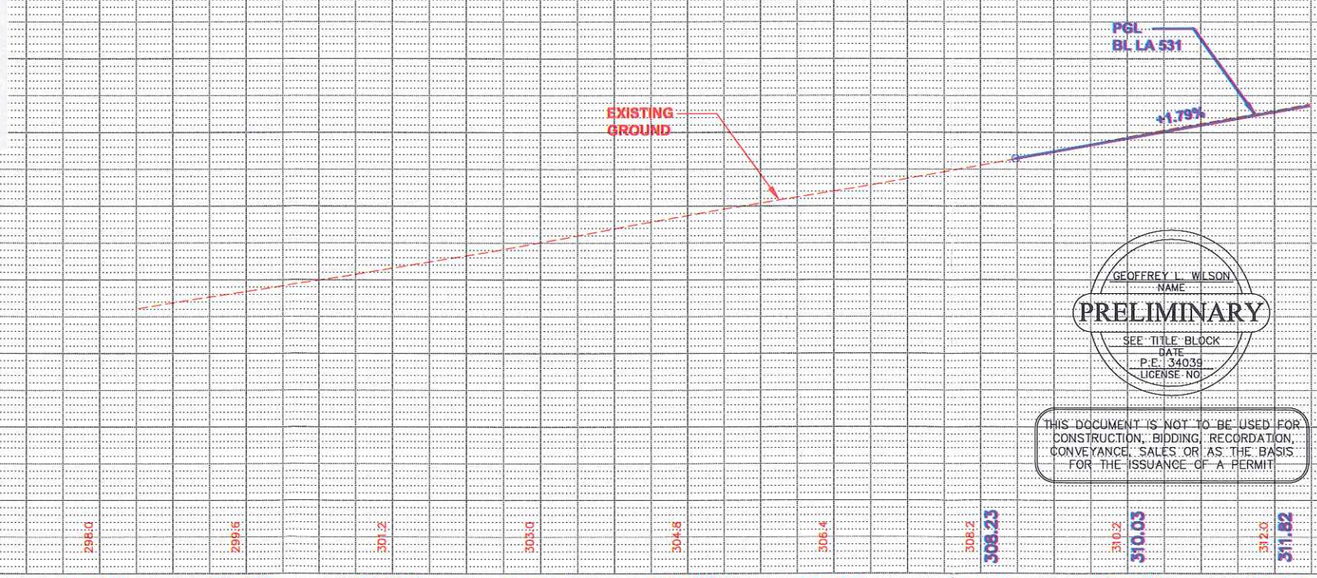
Legend

- Existing Right of Way
- Proposed Right of Way
- Proposed Shoulder
- Proposed Edge of Pavement
- Proposed Inside/Center Lane Line
- Proposed Raised Pavement

LA 531 OVERPASS LINE & GRADE STUDY

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STATE PROJECT NO. H.001799



GEOFFREY L. WILSON
NAME
PRELIMINARY
SEE TITLE BLOCK
DATE
P.E. 34039
LICENSE NO.

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SHEET NUMBER	
PARISH	WEBSTER
CONTROL SECTION	111-02
STATE PROJECT	H.001799
DESIGNED	WILSON
CHECKED	LEAR
DETAILED	THYMES
CHECKED	LEAR
SERIES NUMBER	1 OF 4

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE
LA 531

LA 531 OVERPASS

SIGMA CONSULTING GROUP, INC.

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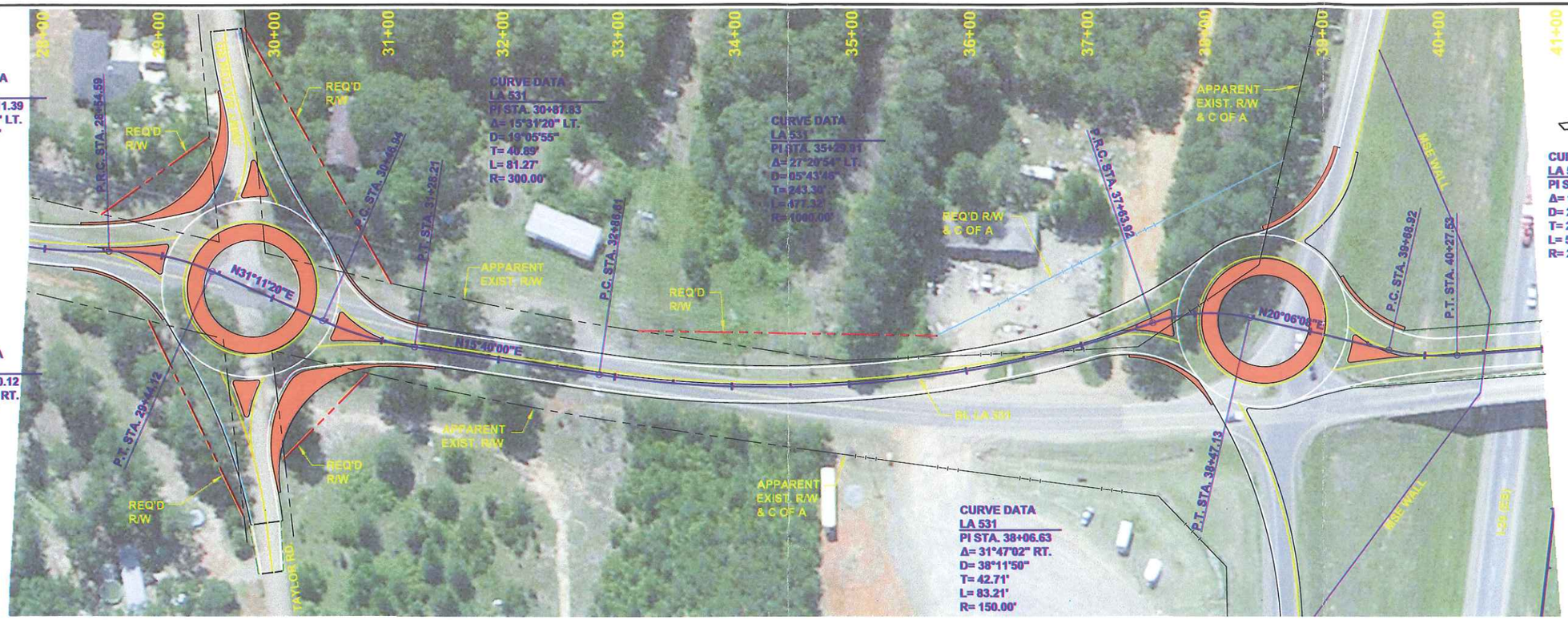
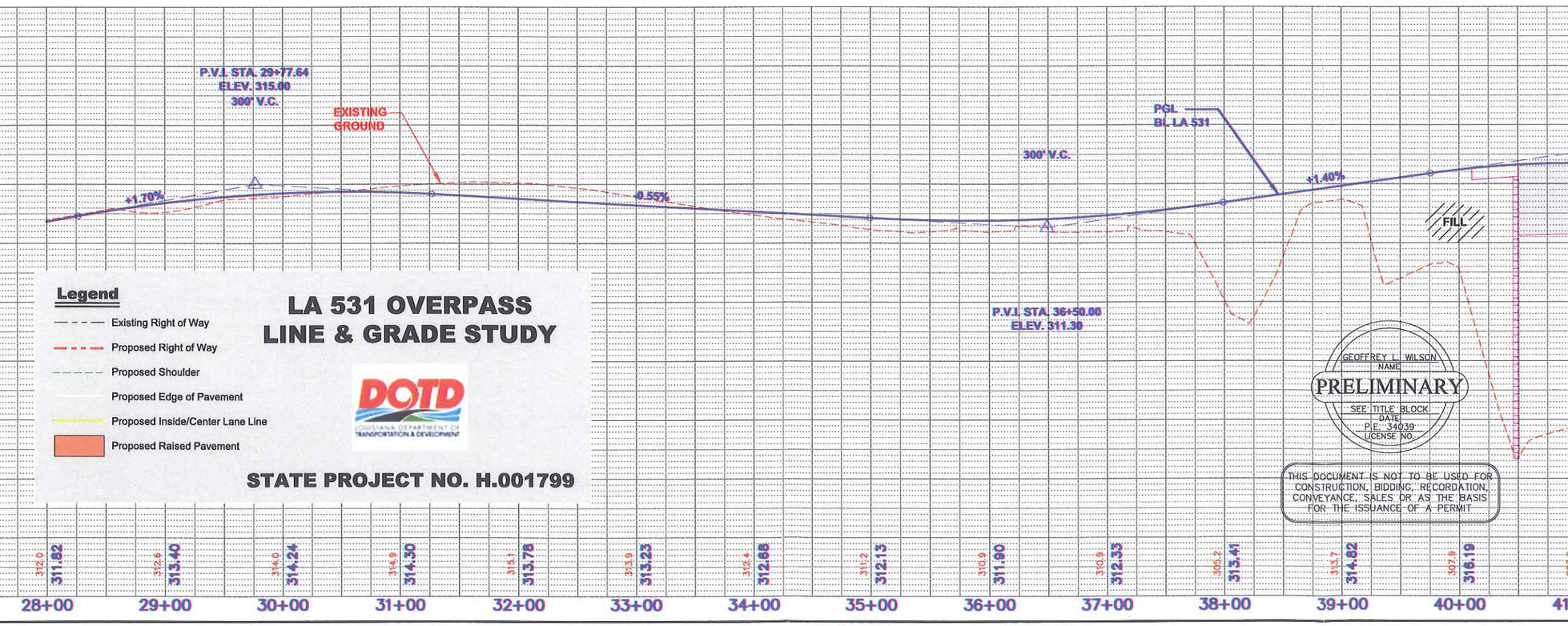
DECEMBER 2015

LINE & GRADE STUDY - DRAFT





Legend

- Existing Right of Way
- Proposed Right of Way
- Proposed Shoulder
- Proposed Edge of Pavement
- Proposed Inside/Center Lane Line
- Proposed Raised Pavement

LA 531 OVERPASS LINE & GRADE STUDY

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STATE PROJECT NO. H.001799

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SHEET NUMBER	
PARISH	WEBSTER
CONTROL SECTION	111-02
STATE PROJECT	H.001799
DESIGNED WILSON	
CHECKED LEAR	
DETAILED THYMES	
CHECKED LEAR	
SERIES NUMBER	2 OF 4

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE
LA 531

LA 531 OVERPASS

SIGMA CONSULTING GROUP, INC.

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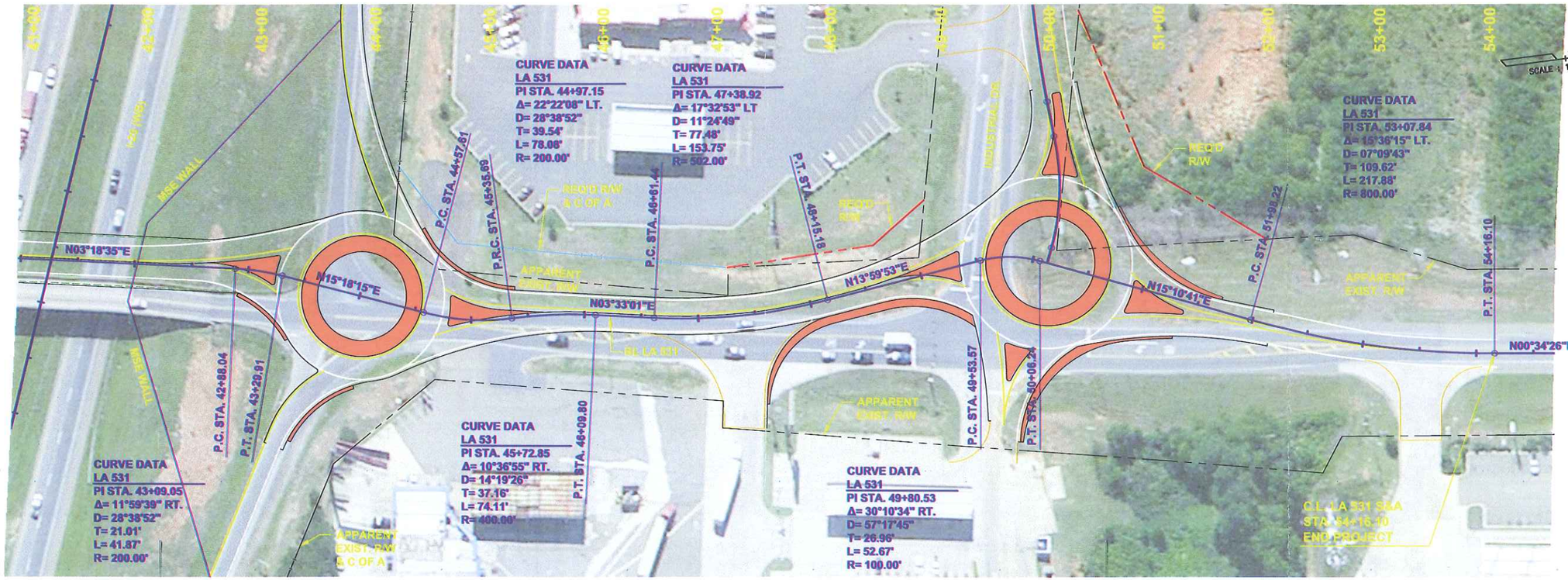
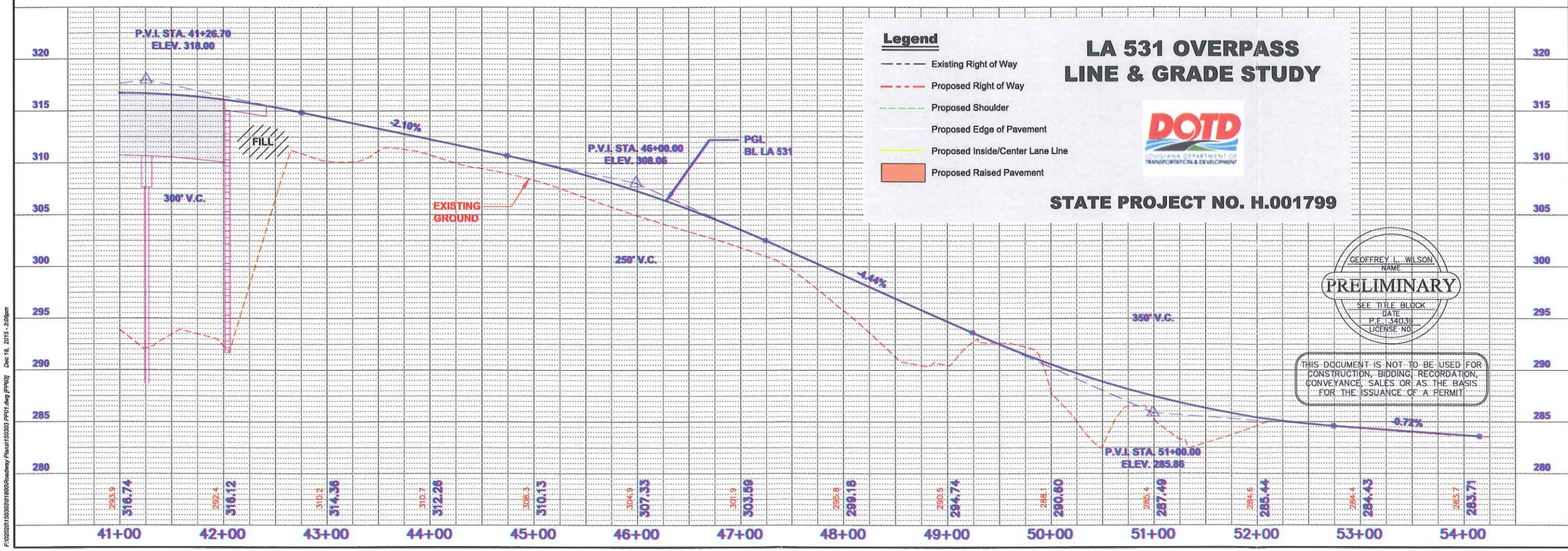
DECEMBER 2015

LINE & GRADE STUDY - DRAFT





Legend

- Existing Right of Way
- Proposed Right of Way
- Proposed Shoulder
- Proposed Edge of Pavement
- Proposed Inside/Center Lane Line
- Proposed Raised Pavement

LA 531 OVERPASS
LINE & GRADE STUDY

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STATE PROJECT NO. H.001799

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SHEET NUMBER		
PARISH: WEBSTER	CONTROL SECTION: 111-02	STATE PROJECT: H.001799
DESIGNED: WILSON LEAR CHECKED: DETAILED: THYMES LEAR CHECKED:	SERIES NUMBER: 3 OF 4	

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE
LA 531

LA 531 OVERPASS

SIGMA CONSULTING GROUP, INC.

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DECEMBER 2015

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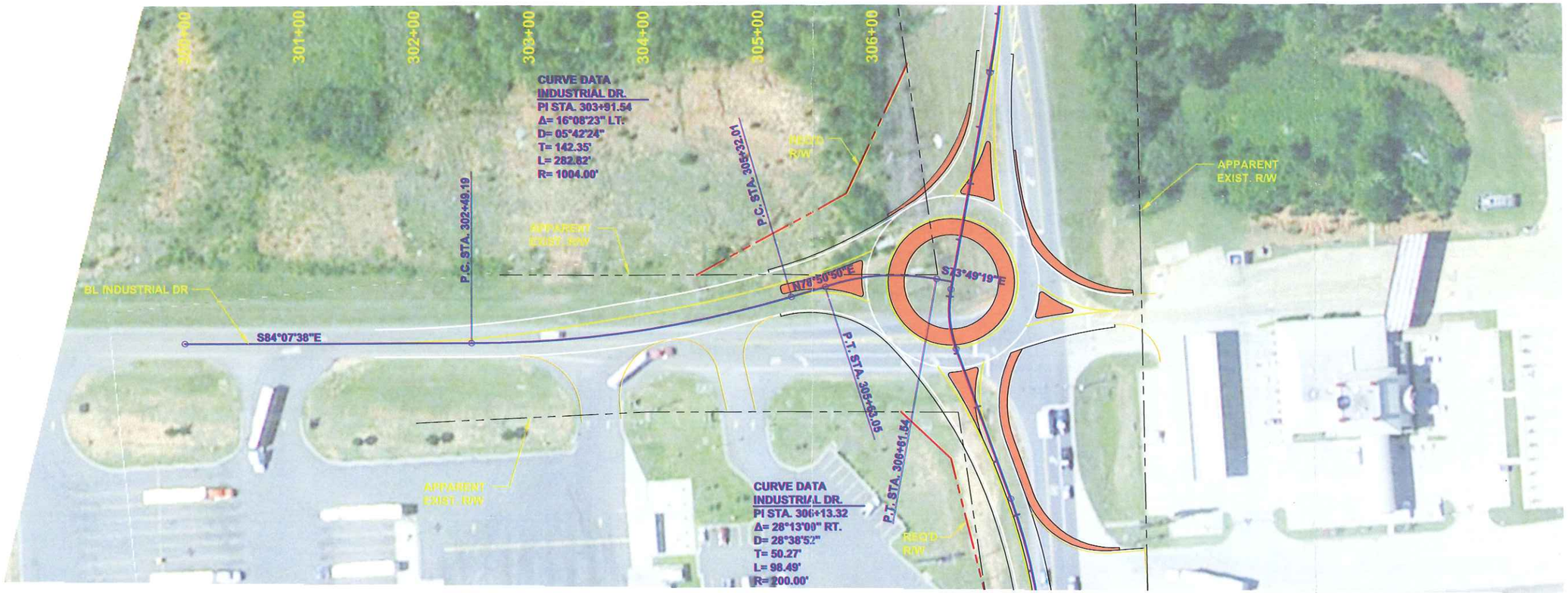

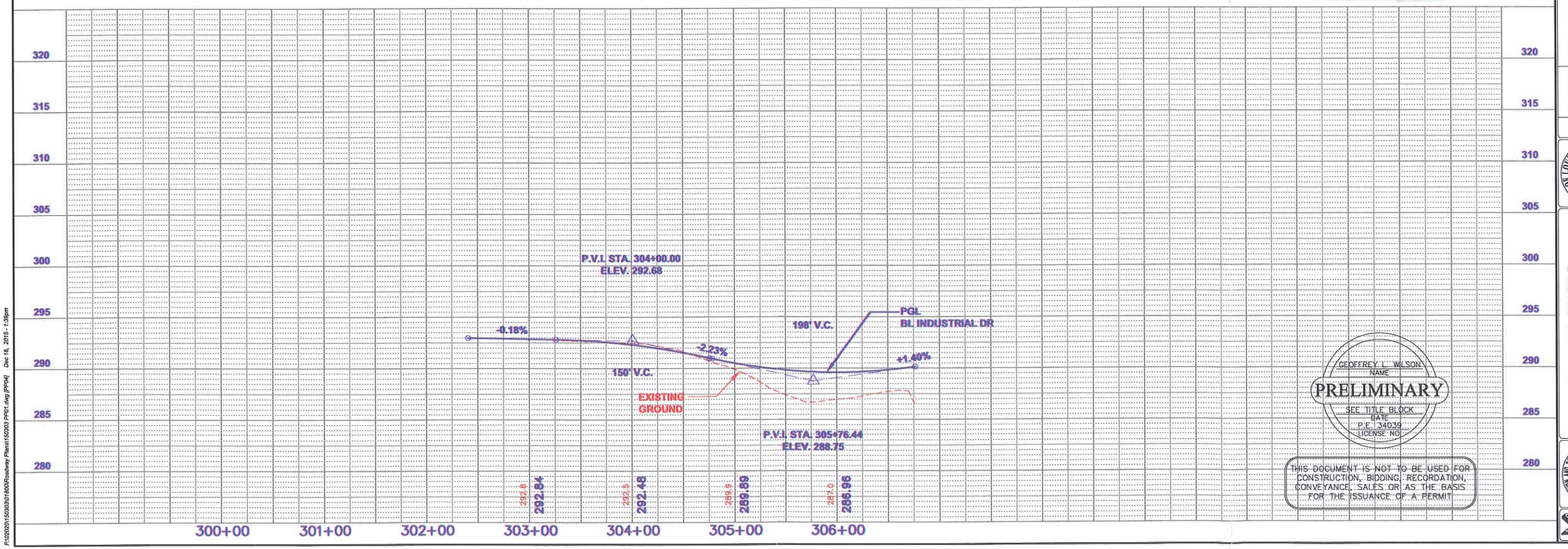

SHEET NUMBER	
PARISH	WEBSTER
CONTROL SECTION	111-02
STATE PROJECT	H.001799
DESIGNED	WILSON LEAR
CHECKED	
DETAILED	THYMES LEAR
CHECKED	
SERIES NUMBER	4 OF 4

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

PLAN AND PROFILE
LA 531

LA 531 OVERPASS

GEOFFREY L. WILSON
NAME
PRELIMINARY
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DATE
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LICENSE NO.

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STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DOTD

SIGMA CONSULTING GROUP, INC.

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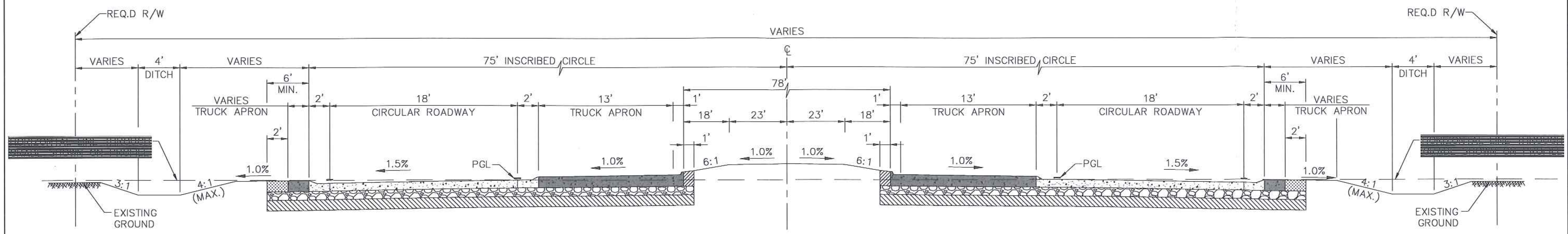
DEC. 2015

LINE & GRADE STUDY - DRAFT



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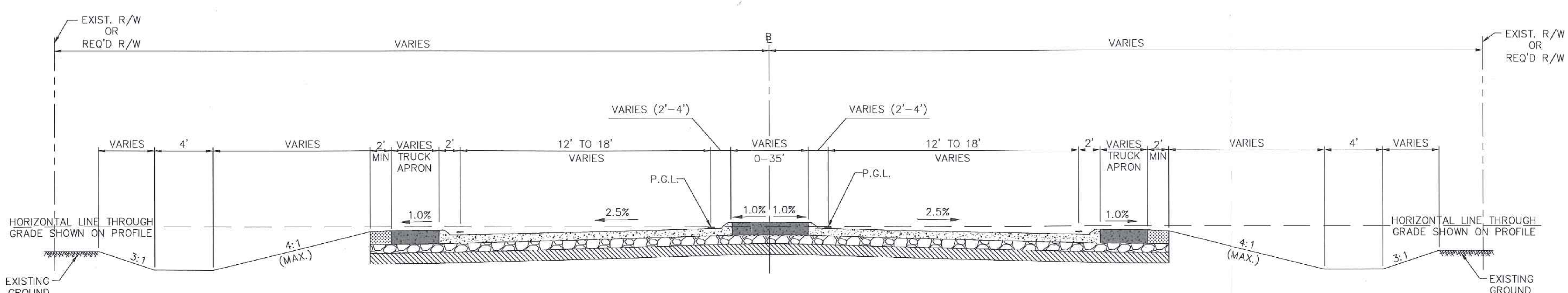
NOT TO SCALE



TYPICAL FINISHED SECTION (SPLITTER ISLAND)

NOT TO SCALE

LEGEND

AGGREGATE SURFACE COURSE

PCC PAVEMENT

PIGMENTED PCC PAVEMENT

BASE COURSE

SUBGRADE LAYER

EMBANKMENT

NOTES:

1. PAVEMENT DESIGN AND MATERIALS TO BE DETERMINED DURING THE DESIGN PHASE OF THIS PROJECT.

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DATE
P.E. 34039
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SHEET NUMBER	
PARISH	WEBSTER
CONTROL SECTION	111-02
STATE PROJECT	H.001799
DESIGNED / CHECKED	WILSON / LEAR
DETAILED / CHECKED	GIBBS / LEAR
SERIES NUMBER	1 OF 2

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

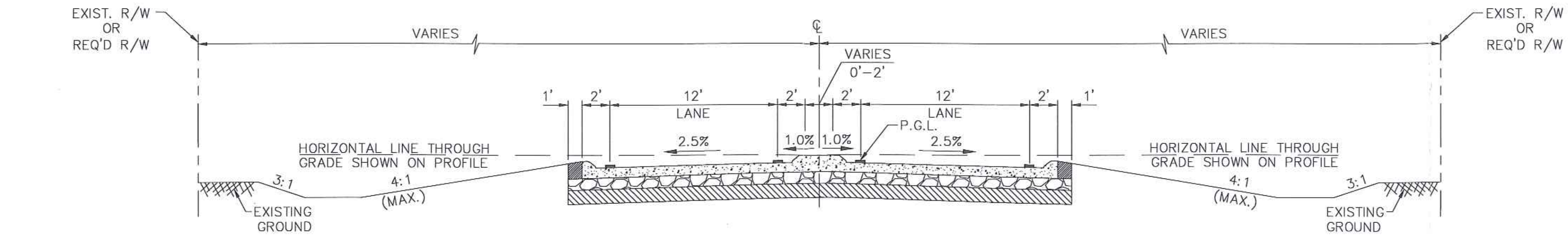
TYPICAL SECTION

LA 531 OVERPASS

SIGMA CONSULTING GROUP, INC.

DEC. 2015

LINE & GRADE STUDY - DRAFT



TYPICAL FINISHED SECTION

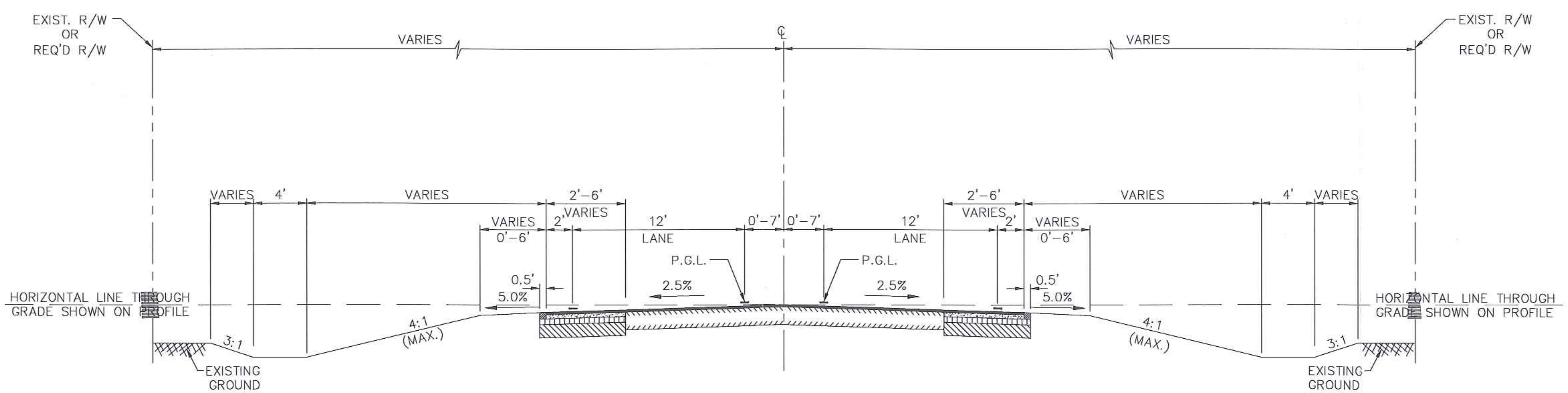
NOT TO SCALE

LEGEND

- AGGREGATE SURFACE COURSE
- PCC PAVEMENT
- BASE COURSE
- SUBGRADE LAYER
- EMBANKMENT

NOTES:

1. PAVEMENT DESIGN AND MATERIALS TO BE DETERMINED DURING THE DESIGN PHASE OF THIS PROJECT.



TYPICAL FINISHED SECTION (TRANSITION SEGMENTS)

NOT TO SCALE

LEGEND

- ASPHALT WEARING COURSE
- ASPHALT BINDER COURSE
- BASE COURSE
- SUBGRADE LAYER
- EMBANKMENT

GEOFFREY L. WILSON
NAME
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LICENSE NO.

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SHEET NUMBER	
PARISH	WEBSTER
CONTROL SECTION	111–02
STATE PROJECT	H.001799
DESIGNED / CHECKED	WILSON / LEAR
DETAILED / CHECKED	GIBBS / LEAR
SERIES NUMBER	2 OF 2

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

TYPICAL SECTION

LA 531 OVERPASS

SIGMA CONSULTING GROUP, INC.

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